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Production Starts Downward Trend

Highest daily average estimated production in 1926, week ended Dec. 25, 2,385,139 bbls. Lowest in 1926, January 30, 1,915,960 bbls.

Gains Expected in Different Areas, However, Probably Will Slow Up Decline. Seminole Shows Further Decrease

By Andrew M. Rowley

Highest daily average estimated light oil production in 1926, week ended Dec. 25, 1,797,349 bbls. Lowest in 1926, Jan. 30, 1,371,600 bbls.

A stronger feeling that the peak of crude oil production in the United States for this year may have been reached during the week ending July 30, is evident at this time. Following a decline of nearly 8,000 barrels in the daily average of the Seminole Field in Oklahoma last week, the production of that area so far this week has averaged around 182,000 barrels a day, a drop of 24,000 barrels daily from the average of last week. Operators believe the output of the greater Seminole area will continue to decline as a result of the placing in effect of the curtailment plan and also because of the natural decline of wells in the field.

It is hard to figure at this time, however, how the output of crude oil can drop sufficiently during the next few months to create a more even balance between production and consumption. The average production of the greater Seminole area during the next two months probably will not be far from 450,000 barrels daily. Big wells are being completed in the Earlsboro Pool there and within six weeks or two months the Little River sector will begin to blossom forth with completions. The curtailment plan being made effective now in Seminole provides for a pinching in of new completions in the Little River area but whether that plan will be made operative two months from now is a question in the minds of some operators.

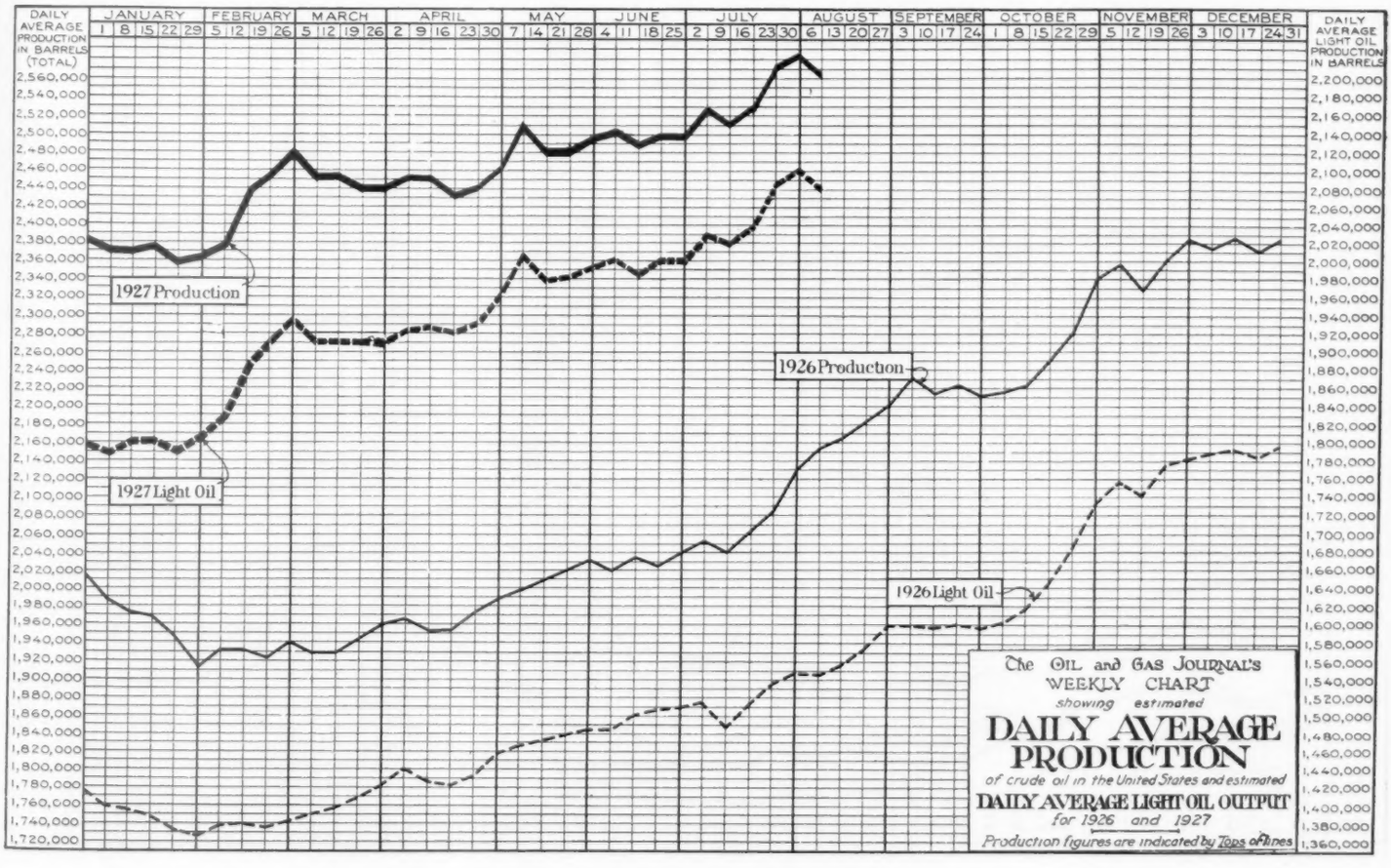
The Seal Beach Field in California is expected to show a gain in output during the next couple of months and West Texas is still displaying considerable activity. Consequently, natural declines in older fields may be offset by gains in other areas, with Seminole still pouring a flood of crude on the market. Consumption has shown a big gain this year and a greater use of airplanes will add to this increase in the future, but it must be kept in mind the season of peak demand is rapidly drawing to a close.

PRODUCTION IN THE UNITED STATES

Estimated daily average production of light and heavy gravity oil in the United States for week ended August 6, and a comparison with the previous week follows:

	August 6		July 30	
	Light	Heavy	Light	Heavy
Oklahoma—				
Tonkawa	20,210	.....	20,340	.....
Burbank	39,270	.....	39,815	.....
Other Osage Fields	31,315	.....	30,865	.....
Cushing and Shamrock	21,445	.....	21,485	.....
Bristow and Eastern Bristow	25,510	.....	25,655	.....
Cromwell	12,370	.....	12,470	.....
Garber	11,525	.....	11,570	.....
Blackwell-Braman	9,955	.....	9,915	.....
Seminole	506,410	.....	514,085	.....
Wewoka	19,145	.....	19,710	.....
Northern Miscellaneous	113,375	.....	113,540	.....
Southern Fields	66,185	.....	66,120	.....
Total Oklahoma	876,715	.....	885,570	.....
North Louisiana	47,840	9,630	47,475	9,685
Arkansas	22,625	84,000	23,255	85,165
North Central Texas	155,435	.....	154,430	.....
West Texas	141,825	.....	139,759	.....
Texas Panhandle	105,185	.....	107,125	.....
East Central Texas	32,612	.....	33,042	.....
Kansas	105,970	.....	106,510	.....
Total Mid-Continent Area	1,488,207	93,630	1,497,166	94,850
Gulf Coast	.....	143,097	.....	141,475
Southwest Texas	.....	31,985	.....	32,395
Eastern	111,500	.....	111,000	.....
Rocky Mountain Area	86,566	.....	92,969	.....
California—				
Santa Fe Springs	41,500	.....	41,500	.....
Long Beach	89,000	.....	90,000	.....
Torrance	5,000	17,500	6,000	17,000
Huntington Beach	70,000	.....	70,000	.....
Dominguez	14,500	.....	15,000	.....
Rosecrans	8,700	.....	8,750	.....
Inglewood	20,000	13,000	20,000	13,000
Ventura Avenue	38,000	.....	37,500	.....
Seal Beach	55,500	.....	57,500	.....
Remainder of State	55,000	186,000	55,000	186,000
Total California	397,200	216,500	401,250	216,000
Total United States	2,083,473	485,212	2,102,385	484,720
Grand Total		2,568,685		2,587,105

Total Decrease, 18,420 Bbls.; Light Oil Decrease, 18,912 Bbls.



Natural Gasoline Higher in Oklahoma

Reduction of Inventories at Refineries Aids Natural Demand and Weakens Refinery Gasolines. Fuel Oil Weak

By C. O. Willson

A strong natural gasoline market and a weak refinery gasoline were the opposing developments of the past week in the Oklahoma (Group 3) refined market. Continued weakness was apparent in fuel oils although the price changes for the week were of minor importance. Price levels of other products were unchanged.

In the motor fuel market, probably the same explanation can be given for the strength in natural gasolines as for the weakness in refinery gasolines. The natural market was strong, with an almost daily advance in prices, due to the fact that refiners were buying steadily. This natural gasoline was being widely utilized to "pep" up refinery gasoline in storage which is being freely offered to the trade.

At the same time, this policy of reducing gasoline storage, coupled with a high current output, was held responsible for the continued slump in refinery gasolines. Although the demand is at the peak point of the year, so much gasoline is being offered—not only in the Mid-Continent but throughout the territory east of the West Coast states—that sellers of refinery gasolines are constantly giving concessions in prices.

A substantial part of the natural gasoline now being sold in the Mid-Continent is going to major refineries located outside that area. The prices at which these refiners have sold refinery gasolines during the past week leaves no doubt that part of the natural gasoline is being used to blend with storage gasoline to secure products of suitable specifications for the domestic and export trade.

The 58-60 U. S. Motor gasoline the first of this week was being quoted at 6½ to 6¾ cents in Oklahoma with the greatest spot movement at the lower figure. Resale material was available as low as 6¼ cents with sales as low as 6 cents basis Group 3 reported from refineries located outside the Mid-Continent. Thus the gasoline market continues to reflect the overproduction situation applying to both crude oil and gasoline.

With the main gasoline consuming period nearing an end and with no immediate prospect of material improvement in the overproduction situation, refiners who have not already done so are reducing their gasoline inventories with little regard to price. In carrying out these programs, refiners whose plants are strategically located as to freight rates—such as the coastal refiners and those located in the main consuming areas—have an advantage over the Mid-Continent group of operators. Buyers, especially those in a position to take care of large orders, are being quoted material at prices Oklahoma refiners are loath to meet.

No price improvement is expected until this excess storage material is absorbed or until there is a turn in the crude petroleum market which would cause refiners to expect higher rather than lower crude prices. In this connection, market students who are keeping in close touch with factors affecting both crude oil and gasoline markets are not expecting improvement over the next 60 days, with many taking a pessimistic view relative to gasolines over the remainder of the year.

REFINED MARKET BAROMETER

Refinery gasoline prices in the domestic market continued to slump during the past week at all points except the West Coast where prices are steady. To keep their current gasoline output moving and also reduce part of their storage, many refiners were going outside their normal marketing territories with low-priced material. In the East the low refinery prices which have prevailed for several weeks resulted in a general tank wagon and service station price reduction of 2 cents effective in New York and the New England States. Natural gasoline, due to a heavy demand from large refiners, are strong, a rapid advance in prices materializing at all points except California. There were no changes in gasoline export prices. Kerosenes and distillates are not generally active and occasional reductions in prices are reported. Fuel oils and gas oils are weak in the Middle West and Mid-Continent. Coastal fuel oil prices are steady. No price changes in lubricants were reported during the week. The domestic demand for lubricants is excellent. A better feeling in regard to the wax market was reported from several refining areas. The export wax market was especially active.

Mid-Continent—Refinery gasolines weak in all areas and prices lower. Rapid advance in natural gasoline prices due to an excellent demand. Kerosenes and distillates quiet. Fuel oils and gas oils weak. No change in other products.

Atlantic Seaboard—Market generally weak. Continued weakness in tank car market responsible for a 2-cent decline in gasoline tank wagon and service station prices. Kerosene weak. Fuel oils and gas oils steady. No change in lubricants. More activity in wax market.

Pennsylvania—Refiners having difficulty maintaining gasoline prices. No change in other products.

Chicago—Good movement of gasolines although sellers forced to reduce prices.

California—Record gasoline consumption on West Coast holding refinery prices steady. Natural gasoline firm. Kerosenes weak.

Mid-Continent Operations

The accompanying table gives the monthly summary of Mid-Continent operations. The data were derived from reports of the Bureau of Mines. The com-

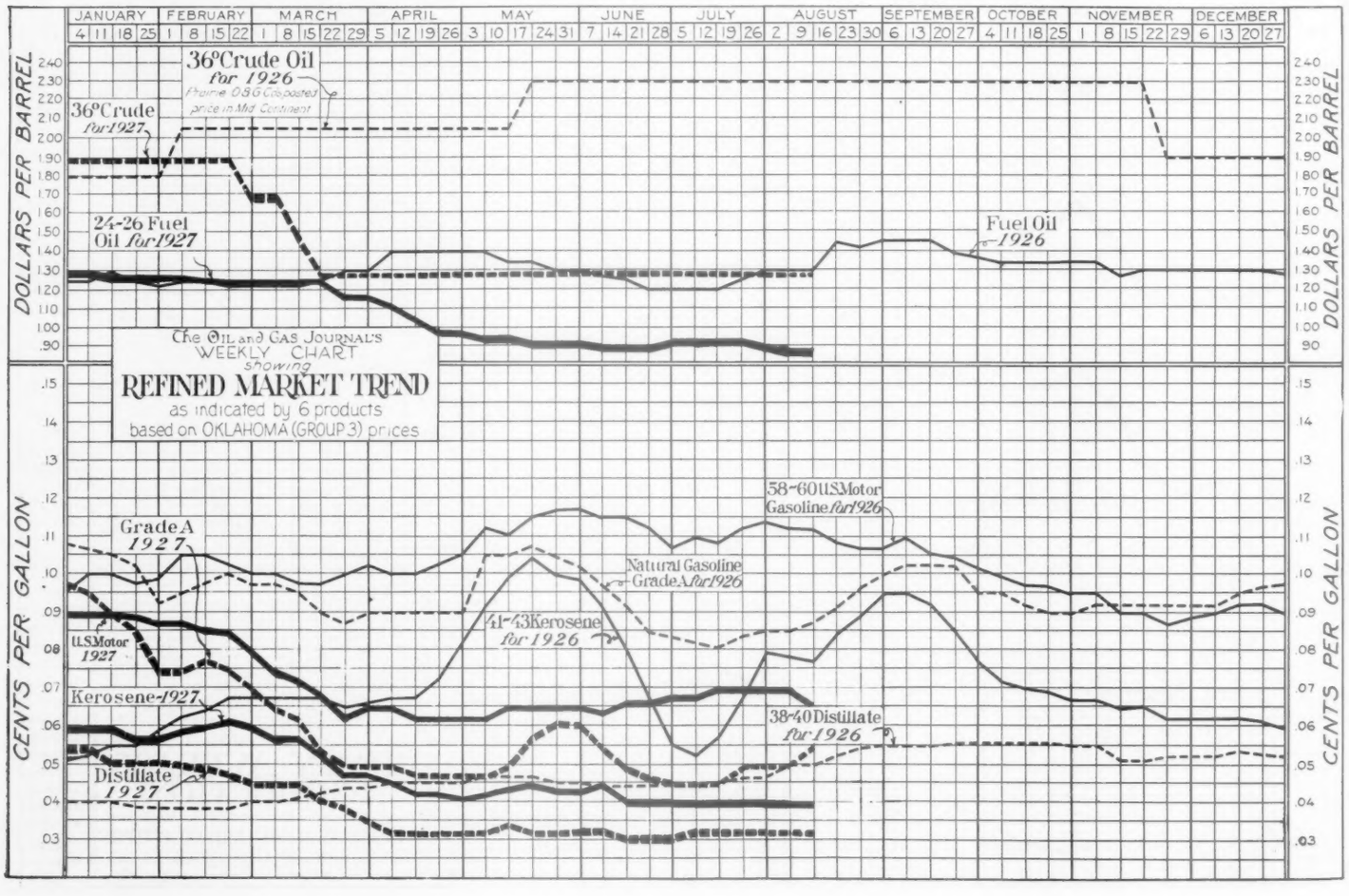
(Continued on Page 142)

***MID-CONTINENT REFINERY OPERATIONS**

(Figures given in thousands of barrels)

	Crude runs to stills	Gasoline output	†Gasoline stocks	Kerosene output	†Kerosene stocks	Fuel & gas oil output	†Fuel & gas oil stocks
June, 1927	13,350	6,213	4,607	947	986	5,411	6,824
May, 1927	13,203	5,472	5,547	1,060	949	5,496	6,588
June, 1926	12,800	5,784	4,070	999	787	5,342	5,810

*Oklahoma, Kansas, North Central Texas, North Louisiana and Arkansas. Based on Bureau of Mines reports. †Stocks end of month.



Hendricks Pool Is Already a Big Field

Winkler County Field May Equal or Surpass the Church-Fields Pool in Crane County. New Pipe Line Planned

By C. D. Lockwood

FORT WORTH, Tex., Aug. 8.—The Hendricks Pool of Winkler County, west Texas, is already a big field. Extending more than 1½ miles north and south, it appears to have a potential producing area at least twice that long and while its width can only be estimated from the present limited knowledge of the structure it has every evidence of equaling that of the Church-Fields Pool in Crane County and perhaps surpassing that great pool. The caliber of wells in this field is inferior to none in west Texas, the latest addition to the list of producers having flowed 735 bbls. in three hours before it had to be pinched in to the size of its neighbors, about 400 bbls. One of these flowed 2,580 bbls. in a 24-hour open flow test and another 1,070 bbls. but all are pinched in to a total of 1,700 bbls.

The progress of drilling wells in this pool has been watched with exceptional interest because the belief has been held for some time that the Hendricks Pool constituted one of the biggest danger spots in west Texas. Tentative understanding among operators that outside tests would be drilled only to the top of the lime and shut down allayed some fears that this pool would upset the market while the absence of pipe lines further mitigated the danger if it should prove as large as anticipated.

New Line to the Field

For the time being, several of these tests will have to be shut down or pinched in as soon as they are drilled into the pay because there is nothing to do with the oil unless storage is built to take care of it. The Southern Pipe Line Co., subsidiary of the Southern Crude Oil Purchasing Co., has the only line in the field at present, a 6-inch from the field to Wickett on the Texas & Pacific Railway where the Southern Crude has its tank farm and a 30-car loading rack. During the past week, however, the American Petroleum Co., subsidiary of the Republic Production Co., started surveying locations for four 55,000-bbl. tanks in the west half of the southeast quarter of Section 81, Block F, G. M. M. B. & A. Survey, adjoining the townsite of Wickett, and announced its intention of laying a new 6-inch line to the field. The distance is about 17 miles and when this line is completed there will be an outlet for approximately 25,000 bbls. daily.

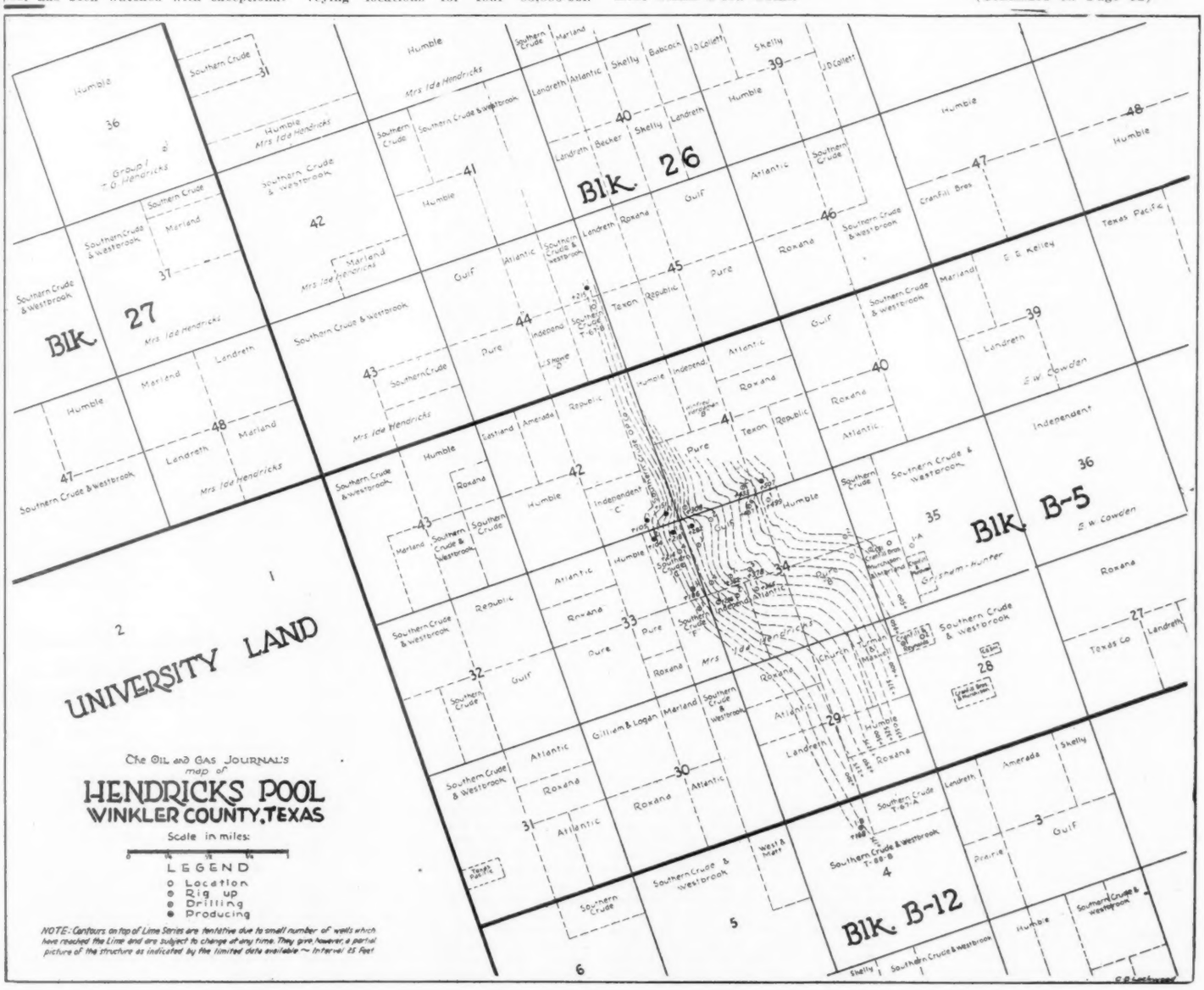
Whether this will influence the price of west Texas crude is a moot question. Crude in the Hendricks Pool averages around 29 to 30 degrees gravity and this brings 78 to 80 cents in the present market. Many observers believe this price would be considerably lower were it not for the fact that most of the oil in the Crane-Upton-Pecos-Winkler district is owned by the major companies and a cut in price would avail them nothing. It would be a repetition of the well-known practice of taking money out of one pocket and putting it in another.

The new line, will, however, remove the dependence of several operators on the Southern Crude and will probably mean the end of the shutdown agreement within a few weeks.

In regard to the potential size of the Hendricks Pool, it is becoming evident that geological structure, as mapped on the top of the Permian lime series, is not the only factor which influences accumulation in this region. From a study of broad structural features throughout west Texas, as well as they can be ascertained from the present inadequate data, it is believed that the Hendricks structure will prove to be a long anticline similar to that on which the Church-Fields Pool is situated. It is not, however, located on the same regional high because the latter runs northwestward through the Gulf Production Co.'s new Waddell discovery and the Connell Pool opened by J. S. Cosden and thence northward through Ector County, according to the way many geologists have it mapped, while the regional feature on which the Hendricks Pool is situated extends in a northwesterly direction from the Fort Stockton vicinity in Pecos County and approximately parallel to the other.

If the Hendricks structure does prove

(Continued on Page 92)


UNIVERSITY LAND
The Oil and Gas Journal's map of
HENDRICKS POOL
WINKLER COUNTY, TEXAS
Scale in miles:
LEGEND
Location
Rig up
Drilling
Producing
NOTE: Contours on top of Lime Series are tentative due to small number of wells which have reached the Lime and are subject to change at any time. They give however, a partial picture of the structure as indicated by the limited data available. — Interval 25 Feet
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Blk. B-12

Changes in Standard of New Jersey

Outline of Probable Plan for Reorganization of Activities. Two Subsidiary Holding Companies Domestic and Foreign

By N. O. Fanning

New York Bureau, The Oil and Gas Journal, Room 629, No. 101 Park Avenue, New York, N. Y.

NEW YORK, Aug. 6.—Although definite plans which are believed to have been formulated for the consolidation of all of the activities of the Standard Oil Co. of New Jersey are being carefully guarded, those familiar with legal and economic phases of organization of America's leading corporations have already guessed at the ultimate form of structure which the Jersey company will assume when this reorganization is completed. Although this structure may differ in some details from that outlined below, it is believed the main feaures will be as stated. First, however, the present structure will be described in order that an idea may be obtained of the changes which the new organization will necessitate.

The present organization, popularly described as the Standard Oil Co. of New Jersey, consists of the Standard Oil Co. (incorporated under the laws of the State of New Jersey) and numerous subsidiaries engaging in the various branches of the oil business here and abroad. The Standard Oil Co. itself is a holding and operating company, directly engaging in the refining of crude petroleum and marketing of its products. Its best known property is the Bayonne-Bayway refinery, which, with a capacity for handling 200,000 bbls. of crude oil a day, is the largest oil refinery in the world. The company in addition owns other refineries and carries on a marketing business, chiefly in a number of states on the Atlantic Coast of the United States. Its fleet of oil tankers under American registry is now being transferred to the newly-formed Standard Shipping Co. as the first major step in the reorganization recently announced.

All other major activities of the Standard Oil Co. of New Jersey are carried on through subsidiary companies, some of which are owned in entirety, and some partly controlled. A list of these subsidiaries, with approximate capitalization in 1919 and extent of control by the Standard Oil Co., follows:

Domestic Companies

Company—	Capitalization	% Owned by S.O. Co.
Carter Oil Co.	$25,000,000	99.9
Humble Oil & Refining	*73,117,577	75.0
Standard of Louisiana	10,000,000	99.9
Marion Oil Co.	70,000	50.0
Oklahoma Pipe Line Co.	4,000,000	99.9
Pennsylvania Lubric Co.	500,000	60.0
Tuscorora Oil Co.	5,000,000	99.9
Underhay Oil Co.	25,000	98.8
Clarksburg L. & H. Co.	1,000,000	51.0
Connecting Gas Co.	1,300,000	31.6
East Ohio Gas Co.	10,000,000	99.7
Hope Natural Gas Co.	20,000,000	100.0
Peoples Nat. Gas Co.	20,000,000	100.0
River Gas Co.	360,000	95.5
Taylorstown Nat. Gas Co.	10,000	30.0
Gilbert & Barker Mfg. Co.	2,000,000	100.0
Interstate Cooperage Co.	200,000	100.0
Standard Shipping Co.	40,000,000	100.0
Standard Dev. Co.	1,000,000	100.0

Foreign Countries

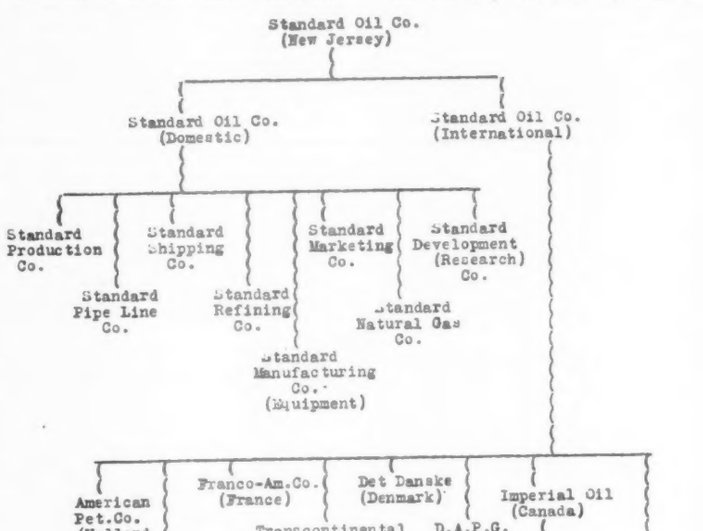
Amer. Pet. Co. (Holland)	$ 5,000,000	51.0
Bedford Pet. Co. (France)	500,000	99.4
Standard Franco-American (France)	.....	50.0
Transcontinental Petroleum (Mexico)	200,000	100.0
Det Danske Petroleum Co. (Denmark)	1,700,000	79.0
Deutsch-American Petroleum Co. (Germany)	1,500,000	99.9
†Imperial Oil, Ltd. (Can.)	30,000,000	77.4
Romana-Amer. (Rumania)	7,500,000	100.0
Societa Italo Americana (Italy)	4,000,000	73.3
Standard Oil Co. (Brazil)	500,000	99.8
Stand. Oil Co. (Venezuela)	.....	100.0
Stand. Oil Co. (Bolivia)	.....	100.0
Standard Oil Co. (Peru)	.....	100.0
West India Oil Co.	3,000,000	99.9
West India Oil Ref. Co.	300,000	49.8

*Present capitalization. †Controls International Petroleum Co., Ltd., operating in Peru and Colombia, South America.

The above figures of capitalization do not represent the true asset value of the companies, in as much as in many instances these concerns are far undercapitalized. The Standard Oil Co. of Louisiana, for instance, has assets in excess of $100,000,000.

Probable New Structure

The new form which the Standard Oil organization may take will be that of a single holding company, having as subsidiaries two holding companies, one to control all domestic business and the other to carry on the foreign operations of the organization. The domestic business will be carried on through subsidiaries, each of which will engage in a single principal branch of the oil business. These subsidiaries will, it is believed, replace the present subsidiaries which are listed above under "domestic."



Geographic limitations will be removed within the country so far as economic operations permit, and it is likely the Jersey company will ultimately be represented actively in almost every state of the Union, in every important branch of the oil business, instead of being confined to several districts as at present.

The foreign operations will be carried on through subsidiaries constituted almost exactly as at present, but all under a new company which may bear the name "Standard International." Geographical and political boundaries will have to be adhered to for obvious reasons. It would not be practical to amalgamate production interests in two such remote parts of the world as Rumania and Peru, for instance. Political considerations are important. In many countries operations must be carried on by organizations incorporated in the particular countries concerned. The oil tanker fleets owned by the Standard Oil Co. of New Jersey through foreign subsidiaries will not be included in the Standard Shipping Co., but will continue to be owned by the subsidiaries operating in the countries whose flags the vessels are flying.

A graphic picture of how the new Standard Oil Co. of New Jersey may ultimately be constituted is given in the accompanying chart which is calculated to give a general idea of the future organization of the Standard Oil Co. of New Jersey, and in most cases purely suppositious names are used for the domestic subsidiaries.

How Change Could Be Made

The most intricate phase of this possible reorganization is the wiping out of existing subsidiary corporations and the forming of new ones to take their place. A possible method of doing this has been suggested.

The first step would be the formation of the two major holding companies as subsidiaries of the parent holding company. The stocks of the various domestic operating subsidiaries would then be transfered to the domestic holding company by exchanging the stocks of the former for that of the latter, and the old operating companies would be dissolved.

Following this procedure, the assets of the domestic operating companies, now dissolved, could be transferred to the various new operating subsidiaries in accordance with the plan outlined.

With regard to the present foreign subsidiaries, their securities, now owned by the Standard Oil Co., could be transferred to the new International company, and their corporate form would continue as before.

Obviously the carrying out of such an involved program would take considerable time, and in as much as no definite plan has yet been officially announced, months may pass before the next step is taken. The formation of the Standard Shipping Co., however, is regarded as the first step toward the consummation of a general reorganization such as that outlined.

Idea Not Revolutionary

The amalgamation of the various subsidiaries of the Standard Oil Co. of New Jersey cannot be regarded as a new departure in corporate development. Many existing American corporations are organized along the lines suggested. The General Electric Co. is an example. This concern's foreign business is all handled by a company known as International General Electric Co. There are many other examples of this procedure. There is an International Telephone & Telegraph Co. which handles the foreign business of the American Telephone & Telegraph Co. The domestic business of most of the larger American industrial companies is in fact not handled through a number of miniature companies, but rather by departments each specializing in a certain branch of the company's business.

The fact is that the Standard Oil Co. of New Jersey is one of the few of the larger American commercial organizations not organized on a purely departmental basis. The reason for this is that Standard of New Jersey has had an extremely rapid growth, which is just now culminating in the need for a more closely-knit structure, plans for which have only been in process of development for about two years.

The same sort of evolution has been going on except on a smaller scale in the Standard Oil Co. of New York. That company, which acquired Magnolia Petroleum Co. and General Petroleum Co., has already dissolved Magnolia Petroleum. The tanker fleet of the General Petroleum Corp. has been transferred to the Standard Transportation Co., which operates the marine business of the New York company. It is also understood that Arthur F. Corwin, who recently became head of the production department of the Standard Oil Co. of New York, after having served in that capacity with the Standard Oil Co. of New Jersey, is engaged in amalgamating the production interests of Standard of New York, Magnolia Petroleum and General Petroleum.

The Standard Oil Co. of Indiana has a similar problem to solve since it acquired control of the Midwest Refining Co., Pan American Petroleum & Transport Co., Lago Oil & Transport Co. and a half interest in the Sinclair Crude Oil Purchasing Co. A plan is now being worked out where Pan American Petroleum and Lago Oil stock can be exchanged for Standard of Indiana stock, and ultimately all the departments of the various Standard of Indiana subsidiaries are expected to be consolidated.

New Jersey Company Purchases Rights to Dr. Bergius Process

NEW YORK, Aug. 8.—The Standard Oil Co. of New Jersey has closed negotiations with the German Dye Trust for the purchase of the American rights to patents on the Bergius process for extracting oil from coal. President W. C. Teagle, who is now in Germany, has notified the New York office of the conclusion of the deal.

While the New Jersey company will not start immediate production of oil from coal the company is protecting itself against possible future competition.

It is understood the company will carry on experiments immediately in this country with a view to further perfecting the process.

New Zone Believed Found at Seal Beach

Production of Field May Reach 75,000 Bbls. Daily Within Next 60 Days. Opinion Divided as to New Sand

By L. P. Stockman

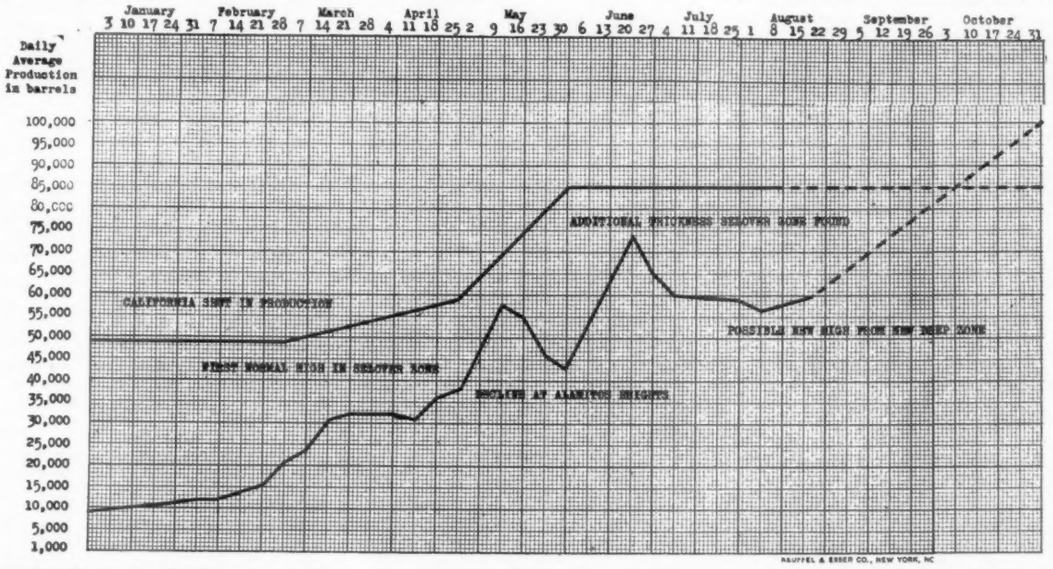
The proving up of the deep sand at Seal Beach for big production recently will probably result in a substantial increase in the daily output of that field within the next 30 or 60 days. The industry has been more or less in the dark heretofore as to existing structural conditions in both the older section and at Alamitos Heights due to the limited number of deep tests finished and the reluctance of some operators to lay their cards face up on the table. Based on the outcome of drilling concluded up to the present time and the numerous wells already under way, daily production of the Seal Beach Field looks as though it may possibly reach the 75,000-bbl. mark within 60 days, if no measures are adopted in the meantime to restrict drilling operations.

The maximum to be attained depends, of course, upon the attitude of operators and the rapidity with which additional deepening work gets under way. The so-called deep Wasem zone discovered by the General Petroleum some six weeks ago, or on June 22, to be exact, has resulted in considerable speculation as to the productivity of this second zone. The limited amount of information available at the present time tends to indicate that the Wasem sand is a rather limited oil-bearing member which may or may not have any very appreciable effect on production.

Another serious factor has developed, however, which will bear minute watching during the course of the next few weeks. Particular attention is directed to the possible existence of a third very prolific sand or a division of the Wasem zone into two definite sections, an upper and a lower. Geologists are divided in their opinions as to existing conditions and the writer will therefore present the situation as it looks at the present time based on the limited amount of information available.

Summary of Progress

Before proceeding further it might not be amiss to make a brief summary of the progress made to date in developing deep sand production in this area. Starting back in the month of February, 1927, when the Pan American brought in its No. 1 Naples flowing 2,500 bbls. of 26.5 gravity oil daily from the Selover sand at 4,757 feet, we find that deeper drilling has been more or less consistent during the subsequent period following this completion. No. 1 Naples, which was responsible for the opening up of the Alamitos Heights or town lot section of the Seal Beach Field, was only drilled 22 feet into the sand at that time in order to eliminate the possibility of developing bottom water or encountering edgewater in as much as the outer limits of the field were thought to be in close proximity to the location of this well. Other operators followed a similar procedure with the same idea in mind and many of the wells were producing from the upper 25 or 30 feet of the Selover zone for some time. A little later a number of wells ceased flowing practically simultaneously and deepening work was immediately undertaken in order to ascertain the depth of this sand and the possibility of recompleting the wells which had stopped flowing. The result was that the Petroleum Securities opened up another 100 feet of the same zone and completions subsequent to that time have all taken the maximum sand available. The drilling of this additional thickness resulted in the establishment of a peak production of approximately 75,000 bbls. per day about six weeks after the first high of 60,000 bbls. had been attained on or about May 8. Daily production, however, declined to a low of 40,000 bbls. between these two highs. In the meantime the General Petroleum drilled nine wells on its Wasem lease and later suspended operations due to the failure to develop big production because of the unfavorable location structurally. With everything to gain and nothing to lose, this company selected No. 7 Wasem as a deep test and drilling was accordingly resumed. This well discovered the so-called Wasem sand from which it produced 525 bbls. initially from 5,264 feet. This was the first concrete evidence of the existence of a second zone in the town lot area.



A peculiar condition arose simultaneous with the discovery of the Wasem sand in that three separate zones were definitely identified in the Seal Beach Field. In the older section the upper horizon, due to the wildcatting activities of the Shell, had been designated as the Bixby, while the second zone found by the Marland in the same area was termed the Selover. The Bixby sand was rather limited in area and hence was not encountered in the Alamitos Heights section. The Selover zone, on the other hand, which has proven the main source

(Continued on Page 86)

Russian Oil Market Agreement

Said To Be Necessary To Avoid Risk of Lower World Prices. Review of the Situation Leading to Dispute

By N. O. Fanning

New York Bureau, The Oil and Gas Journal, Room 629, No. 101 Park Avenue, New York, N. Y.

NEW YORK, Aug. 6.—The international oil dispute over Russia is assuming serious proportions, in the opinion of oil men and diplomats conversant with this affair. One who does not wish to be quoted says, "If Russia were a passing factor in the oil business this controversy would be incidental; however, the fact is that Russia is just beginning to awaken to its oil reserves. Production is not only increasing, but new producing areas are being opened up. The bigger the production under the Soviet regime, the more acute will be the question of how that oil is going to be marketed abroad and by whom. The only logical settlement of this dispute lies in an agreement by all principal marketing companies operating outside Russia in countries which can be economically reached by Russian oil to handle Russian output. At present there is a negative agreement covering only Europe; but even this agreement is half-hearted in character. What is required is an agreement covering the Near East and Far East as well. This agreement should not be to boycott Russian oil, but to give it an outlet without making it a bone of contention among the various marketing companies."

The danger in the present situation is that any serious fight between organizations as powerful and widespread as Standard Oil, Royal Dutch, or Anglo-Persian Oil, which is backed by the British Government, is likely to have ramifications throughout the world. Some American marketers say that the Royal Dutch-Shell combine in precipitating such a struggle, is threatening world peace; but moderate thought believes that the struggle will be confined to commerce alone; perhaps this is a case of the wish being father to the thought.

If the international oil struggle continues it will mean lower prices for oil products throughout the world for a long time to come. Already the Far East has felt the effects of this in cuts of 10 to 20 per cent in fuel oil and kerosene. Reductions in such a wide area will probably be felt in other markets.

Chronology of Struggle

The various steps which have led up to the controversy over Russian oil are briefly as follows:

1914—Outbreak of World War involving Russia.

1918—Russian revolution, with domination of country by the Soviet.

1917-18—Practical destruction of Russian oil fields, including refineries, pipe lines and wells, in World War and revolution.

1919—Organization of Russian Oil Syndicate to conduct oil fields under Soviet ideas; properties taken over include those formerly operated by Dutch-Shell representing original investment of approximately $2,000,000.

1920—Standard Oil Co. of New Jersey purchased controlling interest (approximately 51 per cent) in Nobel Brothers, which had before revolution refined 60 per cent of Russian output.

1921-27—Russian oil industry restored under Soviet administration; annual production, which had fallen from 69,000,000 bbls. a year just before the World War to 25,000,000 bbls. at time Soviet regime commenced, increased to annual rate of about 50,000,000 bbls. for 1927.

1921—Standard of New Jersey, Dutch-Shell combine and Anglo-Persian make agreement not to buy Russian oil except on certain conditions which have never been met by Soviet.

1926—Standard Oil of New York and Vacuum make contracts to buy Russian kerosene, gas oil and fuel oil for marketing in Near and Far East, including exclusive contract with Vacuum to market Russian oil products in Egypt.

1926—Russian Soviet administration makes exclusive agreements with companies dominated by Leon Wenger for marketing Russian oil in Europe. These companies include Compagnie Financiere Belge des Petroles, Compagnie Francaise des Petroles, Purifina Societe Anonyme and La Petrofina Francaise.

1927—British-Soviet diplomatic break; Soviet moves to reorganize British oil marketing arrangements; to distribute oil in England from terminal in Germany.

1927—Standard of New York and Vac-

(Continued on Page 86)

New Peak in Refinery Crude Runs

Daily Throughput of Mid-Continent Plants Largest in History of Field. Increases General With One New Plant

By W. T. Ziegenhain

The average crude runs in the Mid-Continent plants for August of 457,800 bbls. are the highest in the history of that area, exceeding last month's average daily by 29,725 bbls. and the runs of August of last year by 50,325 bbls. There is a general tendency for most refiners to increase their runs slightly and in a few instances, operators have materially increased their runs.

Oklahoma leads in the amount of increase in runs over last month by running 189,575 bbls., or 9,300 bbls. more than last month. Kansas refiners increased their runs 7,900 bbls. Louisiana 6,100 bbls. and North Central Texas 6,600 bbls. The Arkansas runs remained about the same. Compared to a year ago, the North Central Texas refiners have made the greatest increase, their runs having increased 27,875 bbls. Oklahoma's increase amounts to 15,125 bbls, while the Kansas, Louisiana and Arkansas runs show only slight increases.

The total number of plants and plants operating during August of the two years are practically the same but the capacity of the total in 1927 is 45,000 bbls. higher, the principal increase being in Oklahoma.

MID-CONTINENT REFINERY OPERATIONS

TABLE NO. 1

(Based on plants August 1, 1927, and July 1, 1927)

	*No. plants Aug. 1	Crude cap. (bbls.)	Crack. cap. (bbls.)	Plants oper. Aug. 1	Runs to stills Aug. 1 (bbls.)	Plants oper. July 1	Runs to stills July 1 (bbls.)	Daily inc. Aug. 1 (bbls.)
Oklahoma	47	272,900	80,100	44	189,575	43	180,275	9,300
North Central Texas	42	179,800	41,800	38	111,900	37	105,300	6,600
‡Kansas	20	131,500	61,600	16	96,200	16	88,300	7,900
North Louisiana	5	46,300	19,300	4	40,100	4	34,000	6,100
Arkansas	11	34,300	30,000	8	20,025	8	20,200	†175
Total	125	664,800	232,800	110	457,800	108	426,075	29,725

*Does not include plants shut down one year of more. †Decrease.
‡Includes two Missouri plants.

TABLE NO. 2

(Based on plants August 1, 1927, and August 1, 1926)

	*No. plants Aug. 1, 1926	Crude cap. Aug. 1, 1926 (bbls.)	Plants oper. Aug. 1, 1926	Runs to stills Aug. 1, 1926 (bbls.)	Daily inc. Aug. 1, 1927 (bbls.)
Oklahoma	52	258,300	49	174,450	15,125
North Central Texas	38	163,750	30	84,025	27,875
‡Kansas	21	126,000	18	91,700	4,500
North Louisiana	6	42,000	5	36,000	4,100
Arkansas	9	29,000	9	21,300	†1,275
Total	126	619,050	111	407,475	50,325

*Does not include plants shut down one year or longer. †Decrease.
‡Includes one Missouri plant.

Oklahoma

The Empire Refineries Inc., will start the operation of their Okmulgee plant about August 15, having been down more than a month during the installation of new equipment to replace that destroyed by fire. Automatically operated control devices have been installed on the new fractionating towers and the replacements include the latest developments in distilling equipment. The two new Dubbs units at the Empire's plant at Ponca City are nearing completion and trial runs are scheduled for the latter part of August or the first part of September. The Sun company at Yale has increased the capacity of that plant from 3,000 to 4,000 bbls. by the addition of a 1,000 bbl. shell still, towers and auxillary equipment and have increased the crude runs for the month accordingly.

Kansas.

The Derby Oil Co., at Wichita has discontinued the operation of their Dubbs units while hot oil pumps are being installed to replace the gravity feed system. They expect to resume operations within the next 30 days.

North Central Texas

The new 1,000 bbl. refinery of the Home Refining Co., at Muenster has started operating and is now running 400 bbls. daily. The Empire Refineries Inc. expect to make trial runs on the two new Dubbs units at their Gainesville plant during the latter part of August and will start their operation during September.

Arkansas

There were no changes in the operations of the plants in Arkansas except for a very slight decrease in the runs. This has been characteristic of the operations over the last year.

North Louisana

With the addition of considerable new equipment the Crystal Oil Refining Co., has increased the capacity of its Shreveport plant to run 13,000 bbls. and the crude runs have been increased in proportion this month. Except for this change the operations of the North Louisiana refiners remained the same.

RUNS TO STILLS IN MID-CONTINENT REFINERIES

	Bbls. Daily
1925	
May 1	398,940
June 1	423,950
July 1	440,350
August 1	427,382
September 1	407,690
October 1	415,575
November 1	383,225
December 1	375,979
1926	
January 1	390,200
February 1	385,845
March 1	365,990
April 1	368,210
May 1	391,355
June 1	415,450
July 1	410,070
August 1	407,475
September 1	419,995
October 1	408,975
November 1	417,575
December 1	403,450
1927	
January 1	403,625
February 1	418,595
March 1	418,920
April 1	401,860
May 1	407,355
June 1	426,170
July 1	428,075
August 1	457,800

REFINERY OPERATIONS IN OKLAHOMA

(Plants which have been in operation during the past year.)

Name and Location—	Daily Capacity	Runs August 1	Runs July 1
Anderson-Prichard Oil Corp., Cyril	2,500	1,800	1,900
Barnsdall Refineries, Inc., Barnsdall	6,000	3,500	3,500
Barnsdall Refineries, Inc., Okmulgee	10,000	5,500	5,500
Bell Oil & Gas Co., Grandfield	4,500	2,100	2,000
Bolene Refining Co., Enid	5,000	2,000	2,000
Cameron Refining Co., Ardmore	4,000	3,300	3,000
Canfield Refining Co., Yale	500	75	75
Champlin Refining Co., Enid	16,000	11,000	11,000
Continental Oil Co., Sapulpa	10,000	2,400	2,400
Cushing Refining & Gasoline Co., Blackwell	1,500	1,500	1,300
Cushing Refining & Gasoline Co., Cushing	3,500	2,000	2,000
Empire Refineries, Inc., Cushing	5,000	4,700	4,700
Empire Refineries, Inc., Okmulgee	3,000	1,500	....
Empire Refineries, Inc., Ponca City	7,500	7,500	7,500
Garber Refineries, Inc. (Omar), Garber	3,500	3,200	3,000
Gilmer Oil Co., Ringling	1,500	Shut down	Shut down
Globe Oil & Refining Co., Blackwell	5,000	5,000	4,000
Illinois Oil Co., Cushing	3,000	2,500	1,600
Imperial Refining Co., Ardmore	5,000	3,000	3,300
Independent Oil & Gas Co., Okmulgee	4,000	2,700	2,700
Interocean Refining Co., Bristow	4,000	1,000	1,000
Johnson Oil Refining Co., Cleveland	6,000	5,500	5,300
Marland Refining Co., Ponca City	28,000	22,000	20,000
Mid-Continent Petroleum Corp. (Cosden), West Tulsa	40,000	24,000	24,000
Oil State Refining Co., Enid	2,000	Shut down	Shut down
Oil State Refining Co., Allen	800	500	500
Peppers Gasoline Co., Covington	1,000	1,000	700
Pierce Oil Corp., Sand Springs	12,000	7,000	7,000
Producers Oil Co., Bristow	2,500	1,000	1,000
Producers & Refiners Corp., West Tulsa	6,000	3,500	3,500
Pure Oil Co., Ardmore	5,000	2,000	2,000
Pure Oil Co., Muskogee	8,000	7,000	6,500
Riley Petroleum Co., Bristow	1,000	500	500
Rock Island Refining & Pipe Line Co., Duncan	2,500	1,500	1,500
Sayre Oil & Refining Co., Sayre	500	Shut down	Shut down
Shaffer Oil & Refining Co., Cushing	10,000	10,000	10,000
Sun Oil Co., Yale	4,500	4,000	3,000
Sinclair Refining Co., Muskogee	1,000	700	Shut down
The Texas Company, West Tulsa	10,000	12,000	12,000
Texas Pacific Coal & Oil Co., Wynnewood	2,500	1,600	1,600
Tidal Refining Co., Drumright	10,000	8,000	8,500
Transcontinental Oil Co., Boynton	2,500	1,500	1,500
Transcontinental Oil Co., Bristow	5,000	4,000	4,000
Tonkawa Petroleum Co., Tonkawa	2,500	800	800
Western Oil Corp., Beckett	2,000	1,000	1,000
White Oak Refining Co., Allen	2,000	2,000	1,800
Yale Oil Corp., Yale	1,500	1,200	1,100
Total	272,900	189,575	180,275

REFINERY OPERATIONS IN NORTH LOUISIANA

(Plants which have been in operation during the past year.)

Name and Location—	Daily Capacity	Runs August 1	Runs July 1
Crystal Oil Refining Corp., Shreveport	13,000	13,000	6,500
Great Southern Refining Co., Ardis	2,000	Shut down	Shut down
Louisiana Oil Refining Corp., Shreveport, Bossier	20,000	16,500	16,000
Shreveport Producing & Refining Co., Shreveport	5,500	5,200	5,500
*The Texas Company, Shreveport	5,800	5,400	6,000
Total	46,300	40,100	34,000

*Topping.

REFINERY OPERATIONS IN ARKANSAS

(Plants which have been in operation during the past year.)

Name and Location—	Daily Capacity	Runs August 1	Runs July 1
Henry H. Cross Co., Smackover	4,000	4,000	4,000
Home Refining Co., Camden	500	Shut down	Shut down
Home Oil & Refining Co., Hot Springs	500	Shut down	Shut down
Houston Oil Co., Camden	3,000	2,300	2,300
Kettle Creek Refining Co., Pearson	6,000	2,500	2,500
Lion Oil & Refining Co., El Dorado	12,000	6,500	6,500
Newark Refining Co., El Dorado	1,800	900	1,100
Ouachita Valley Refining Co., El Dorado	1,000	625	700
Root Refineries, El Dorado	2,500	2,100	2,000
Simms Oil Co., Smackover	1,000	1,100	1,100
E. M. Tulle, El Dorado	1,000	Shut down	Shut down
Total	34,300	20,025	20,200

REFINERY OPERATIONS IN NORTH CENTRAL TEXAS

(Plants which have been in operation during the past year.)

Name and Location—	Daily Capacity	Runs August 1	Runs July 1
Alamo Refining Co., Isom	1,600	800	1,000
Amarillo Producers & Refiners Corp., Isom	2,000	1,000	1,000
Amarillo Refining Co., Amarillo	5,000	3,200	3,000
American Refining Co., Wichita Falls	7,000	3,200	2,000
Anderson & Prichard Oil Corp. (Western), Wichita Falls	1,500	1,100	1,500
Col-Tex Refining Co., Colorado	7,500	5,800	6,000
Continental Oil Co., Wichita Falls	6,000	2,200	2,200
Dale Oil & Refining Co., Electra	2,500	2,100	2,150
Empire Refineries, Inc., Gainesville	5,000	4,000	4,000
Falls Refining Co., Wichita Falls	1,500	1,000	1,000
Gulf Refining Co., Fort Worth	10,000	13,000	6,500
Hagaman Refining Co., Tiffin	2,000	150	150
Home Refining Co., Muenster	1,000	400	....
Humble Oil & Refining Co., Burkburnett	4,000	3,000	3,200
Humble Oil & Refining Co., McCamey	10,000	10,000	10,000
Iowa Park Producing & Refining Co., Iowa Park	2,500	1,500	1,400
Kent-Middleton Refining Co., Angus	4,000	1,300	1,300
Kent-Middleton Refining Co., Minerva	2,500	1,500	1,500
Macmillan Petroleum Co., Isom	3,500	4,200	3,000
Magnolia Petroleum Co., Fort Worth	12,000	7,000	5,000
Magnolia Petroleum Co., Corsicana	3,000	3,000	3,000
Megargel Refining Co., Megargel	1,500	Shut down	Shut down
Noble Oil & Gas Co., Burkburnett	4,500	2,500	2,500
Olney Oil & Refining Co., Olney	1,500	1,500	1,500
Oriental Refining Co., Dallas	5,000	Shut down	Shut down
*Oriental Refining Co. (Trinity), Dallas	5,000	2,750	2,400
Orient Petroleum Co., Wichita Falls	4,000	1,200	850
Panhandle Refining Co., Wichita Falls	4,000	3,300	3,600
The Petroleum Corp., Electra	2,000	Shut down	Shut down
Primrose Refining Co., Wichita Falls	1,500	1,000	Shut down
Primtex Refining Co., Grand Prairie	2,500	Shut down	2,500
San Angelo Refining Co., San Angelo	1,500	1,500	1,500
Simms Oil Co., Dallas	5,000	3,800	4,000
S.ar Refining & Producing Co., Fort Worth	1,800	250	250
The Texas Company, Dallas	15,000	10,000	12,000
Tidal Western Refining Co., Burkburnett	3,000	2,000	2,100
Texas Pacific Coal & Oil Co., Fort Worth	6,000	2,600	2,600
Transcontinental Oil Co., Fort Worth	5,000	4,000	4,000
Travis Refining Co., Burkburnett	750	150	150
Waggoner Refining Co., Electra	3,400	2,400	2,800
White Eagle Oil & Refining Co., Fort Worth	4,000	1,500	2,000
Valley Refining Co., Wichita Falls	2,500	2,000	1,750
Total	179,800	111,900	105,300

*Operated by Magnolia Petroleum Co.

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State Approves Seminole Curtailment

Legal Status of Agreement Settled by Action of Assistant Attorney General and the Corporation Commission

By Andrew M. Rowley

Official approval of the curtailment plan devised by a committee of operators of the Seminole area in Oklahoma and agreed to by all of the companies operating in that field was given by the Corporation Commission of Oklahoma on Tuesday of this week when the matter was placed before the commission by J. Berry King, assistant attorney-general of Oklahoma. Ray M. Collins, umpire in the area for the companies, was made a special agent of the commission.

Mr. Collins, and a staff working with him, started last week to place the plan in effect and, it is claimed, much of the decline registered during the past week in production of the Seminole area is due to a working out of the effort to have operators pinch in their wells 10 per cent. The plan calls for a permitted production of the four pools in the area—Seminole City, Searight, Bowlegs and Earlsboro—of 450,000 bbls. daily. This figure has not as yet been reached, it being stated difficulties have been encountered in making the plan 100 per cent operative in the short period which has elapsed since the operators approved the plan and work of making it effective was begun.

On Tuesday of this week production of the area was 484,038 bbls., a slight increase over the output on Sunday and Monday when the field produced 480,000 and 482,000 bbls., respectively, on those days. According to a statement made by Mr. Collins, it is believed the 450,000-bbl. limit can be reached within a few days. Completions of large wells in the area over the week end were responsible for the gain in output shown on Tuesday of this week.

Effect on Situation

It is felt the action of the assistant attorney-general in placing the curtailment plan officially before the Corporation Commission and the action of the commission in approving the plan eliminates any question as to the legality of the agreement. Several companies felt there might be a tendency in some quarters to look askance at the agreement, but the approval given it Tuesday will, it is believed, remove all doubt as to its legality.

There seems to be some misconception upon the part of the public and some persons within the petroleum industry as to the effect upon the general situation at this time of making the Seminole agreement 100 per cent operative. It is not believed by men in close touch with the situation that limiting production in the greater Seminole area to 450,000 bbls. daily will have any material effect upon the basic conditions at this time. Already there has been a psychological effect, but that was not warranted by facts in the matter.

Pinching in 50,000 bbls. daily of production in Seminole is merely cutting production in the United States 2 per cent. The Seminole area was regarded as a menace to the industry last November when production was around 100,000 bbls. daily and curtailment plans were being discussed when it was felt the peak of production of the area might not be much more than 400,000 bbls. daily. Consequently, there does not seem to be much basis for any feeling that making the Seminole agreement plan entirely effective will solve the overproduction problem.

An Important Feature

The real important feature of the agreement is the fact it marks probably the first time in the petroleum industry when so many operators with different interests could get together and agree to one definite plan of action. When it is considered the interests of many of the companies are entirely different; that some companies had a large production and others were not so fortunate; that certain companies had acreage which became practically proven territory by developments; that others had drilled up most of their holdings; that some companies needed the production from their leases for their refinery requirements and others because of contracts—when these things are considered, the fact all of these operators did agree to the one plan marks a great forward step in such matters in the industry.

Development in the Earlsboro section of the greater Seminole area is expected to hold up production of the area and help offset the natural decline of wells in other parts of the section. A most important factor in the entire situation is the development of the Little River territory 4 miles south of the Bowlegs Pool. A number of completions in that area are expected by the end of six weeks or two months. The discovery well there came in making more than 12,000 bbls. daily and maintained that output for quite a time and it still is making about 10,000 bbls. daily. The Seminole agreement provides that wells completed in this territory must be pinched in to 100 bbls. daily. There are many oil men who feel, however, that when these wells now drilling are completed it will be a difficult matter to get them pinched in to such an extent.

A report issued by Mr. Collins showing the effect of the curtailment plan on production of the Seminole area from last Friday morning to last Saturday morning, follows:

Seminole Pool

Company and Lease—	Potential Prod'n	Production— Allowed	Actual	Over	Short
Amerada:					
Killing	330	297	348	51	.....
Rentie	1,200	1,080	1,056	.....	24
Fixico	1,600	1,440	1,402	.....	38
Atlantic:					
N. Cudjo	800	720	800	80	.....
Barnsdall:					
Carter	3,960	3,564	3,787	223	.....
Henry	630	567	739	172	.....
Jones	1,350	1,216	1,317	102	.....
Carter:					
B. Carter	245	220	246	26	.....
F. Carter	260	234	240	6	.....
J. Carter	75	67	63	.....	4
Creamer	78	70	0	.....	70
R. Cudjo	1,200	1,060	1,070	.....	10
W. Cudjo	230	207	176	.....	32
Gilliland	400	360	295	.....	65
W. Grisso	1,008	907	900	.....	7
Killing, G. F.	1,900	1,710	1,810	100	.....
Mary Killing	11,000	9,900	10,170	270	.....
Knapp	1,250	1,125	1,342	217	.....
Lukes	1,850	1,665	1,605	.....	60
Pounder	120	108	135	27	.....
Simpson	250	225	235	10	.....
Strothers	1,700	1,530	680	.....	850
Vierson	600	540	550	10	.....
Empire:					
Gross	1,730	1,557	1,620	63	.....
Wilson	500	450	522	72	.....
Gypsy:					
Butler	800	720	567	.....	153
Carter	1,800	1,620	1,777	157	.....
T. Cudjo	700	630	797	167	.....
Fixico	240	216	185	.....	31
Harjo	1,510	1,359	1,630	271	.....
Wolfe	800	720	739	19	.....

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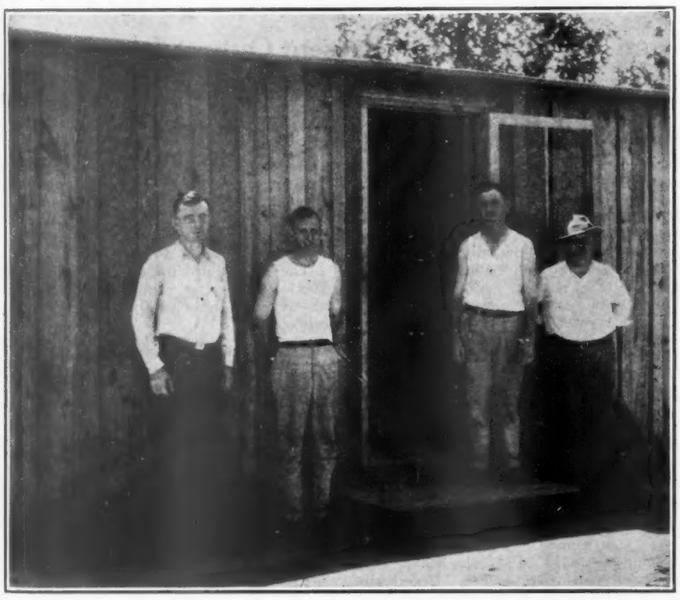
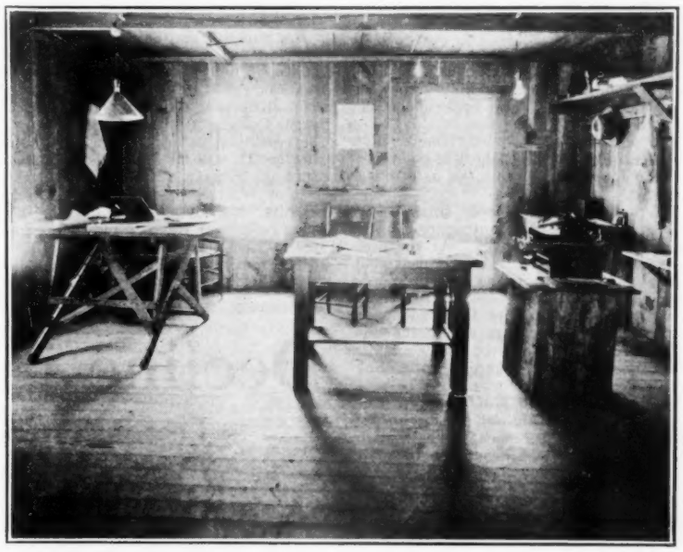
HEADQUARTERS OF CURTAILMENT STAFF



—Photo by Hunt, Seminole.

A nice, low, tar-papered roof makes the interior of the office of the staff making curtailment effective in the Seminole area, sizzling hot during these summer days. Members of the staff shown are, left to right, C. H. Pishny, Carter Oil Co.; Tom Brownfield, Carter Oil Co.; C. D. Carney, Prairie Oil & Gas Co., and J. E. Flynn, Prairie Oil & Gas Co.

WORK SHOP OF CURTAILMENT PLAN



—Photo by Hunt, Seminole.

The staff working with Mr. Collins to make the Seminole curtailment plan effective are not troubled with thick rugs, upholstered furniture, etc. A packing box is used as a typewriter table while a drafting board makes a desk for one man. The picture shows the office of the curtailment plan workers in the Seminole Field.

West Texas Banner Pipe Line Year

Unusual Steel Storage Building Program. Construction Activities of Humble, Gulf, Illinois, Transcontinental and Southern Lines

By J. H. Dameron

FORT WORTH, Tex., Aug. 6.—Recent pipe line congestion in West Texas, due to the rising volume of production and the prospects for far greater production, has started an unusual steel storage building program and has stimulated pipe line construction to the extent that 1927 may be the banner year in pipe line building in the West Texas fields.

A record will probably be established in the building of the Humble Pipe Line Co.'s approximately 400-mile line from McCamey and Pecos to Ingleside harbor on the Gulf Coast. The line is being built with 12 and 10-inch diameter pipe. It is expected to have the line completed within four months from the date it was started.

Actual construction was started May 15 by the Oklahoma Contracting Co., on the north end of the line. At the present writing the line is 75 per cent complete and is expected to be finished by September 15. Extra crews were pressed into service and around 1,300 men were at work on the northern end of the line. The rugged character of most of the country traversed by the line made ditching a real problem.

More than 400 tons of dynamite have been used in blasting out the ditch. One pipe liner who had spent some time in the Seminole Field remarked that the batteries of portable compressors used to power the drills made a din similar to those in a section of Seminole. Transportation likewise was unusually difficult.

Shorter Route to Gulf

The Humble company has one line running into McCamey from its main line system in Comanche County, Texas. The new system will afford a shorter route to the Gulf Coast for tanker shipments. It is reported the Humble company has petitioned Congress for permission to deepen the ship channel at Corpus Christi to 30 feet, which would permit the loading of one tanker every two days. It is also reported the company plans the erection of ten 55,000-bbl. steel storage tanks at the line's terminal.

The main station of the line will be Kemper station, east of the Big Lake Field in southwestern Reagan County, which is a 40,000-bbl. capacity station but is being enlarged to a 90,000-bbl. capacity station. The main line direct to the coast will run south and east to Ingleside. Six 55,000-bbl. steel tanks are being built at that station now.

To the south of Kemper station is the Yates Pool in Pecos County and 10 miles of an 8-inch line to that sensational pool has been built. It is estimated the line from Kemper to Pecos will be about 35 miles long and will have a capacity of approximately 20,000 bbls. daily. The big line from Kemper south will probably have a capacity of approximately 40,000 bbls. daily.

From Kemper station west to the McCamey station the Humble is increasing its line capacity. Originally the company operated an 8-inch and 10-inch line from the McCamey district which extended north to the Church and Fields Pool. That line capacity is being increased by the building of three 8-inch lines and two 10-inch lines from McCamey to Kemper. The 8-inch lines will run about two-thirds of the distance from McCamey to Kemper and the 10-inch lines will be carried on to Kemper. Those lines are under construction.

Line to Winkler County

Recently the Humble company was forced to prorate runs in the Church and Fields Pool because of pipe line congestion and lack of storage. Plans are under way to increase the capacity of the Church and Fields station from a 30,000-bbl. capacity station to a 40,000-bbl. station. The Humble company has started a survey for an 8-inch line from the Church and Fields station to the Hendricks Field in Winkler County. The possibilities of that field appear great and the Southern Pipe Line Co. is the only company with a line in the field. It is estimated the proposed 8-inch carrier would be 53½ miles long.

Six pumping stations are being built on the Humble company's Ingleside line. Station A will be 15 miles northwest of Sonora in Sutton County, Station B will be a little east of Rock Springs in Edwards County. Station C will be built in the northwest corner of Bandera County. Station D will be built near Lytle in Atascosa County. Station E is located east of Whitset in the northwest corner of Live Oak County and Station F is being built near Round Tree on the south line of Live Oak County.

The trunk system and its feeders will make the Humble company the dominating factor in West Texas lines. They will reach, if the Hendricks Field line is built, all pools in the West Texas area below Howard County.

Gulf Company's Plans

The Gulf Pipe Line Co.'s 10-inch screw line from Ranger to Midland was completed in June, 1927, and is 205 miles long. The line extends to the McElroy Pool in Crane County. Through it crude is pumped east to the Ranger station, which is on the Gulf company's main line system south to Port Arthur. Pump stations are located at Midland, Roscoe and Ranger.

Surveys are being made by the Gulf company for an 8-inch line from the McElroy pump station to the Yates Pool in Pecos County. However, no definite announcement has been made by that company that it will build a line into the Yates Pool.

Illinois Pipe Line Co., which has the only two oil carriers out of the Yates Pool at present, is building the third. It will be an 8-inch line running south to a point near Del Rio in Val Verde County and near the Mexican border. The line will be approximately 115 miles in length and will be favored by gravity. The line will handle about 20,000 bbls. daily and it will tap the Southern Pacific Railroad, which has offered an attractive freight rate for West Texas crude for coastal destinations. The Illinois company's present lines run north from the Yates Pool to McCamey, where the company has loading racks and a tank farm. One of the lines from the Yates Pool to McCamey is a 6-inch line and the other is an 8-inch line. The loading rack near McCamey is a 35-car rack.

Two 80,000-bbl. steel tanks are being built by the Illinois company on its tank farm in Section 9, Block 3, I. & G. N. Survey, and a short distance east of Del Rio. It is reported the pipe line company plans the erection of twenty-five 80,000-bbl. tanks on the farm at Del Rio, giving the company a total storage capacity of 2,000,000 bbls. at Del Rio.

Line to Val Verde County

Transcontinental Oil Co. is surveying for a line from the Yates Pool to Pumpville in Val Verde County and about half way between Del Rio and Sanderson. The line will probably be a 10-inch line

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Decline in Mexico Hits Treasury

Loss in Revenue From Oil Big Factor. Present Output Just About Equaling Rising Production from Venezuela Field

By N. O. Fanning

New York Bureau, The Oil and Gas Journal, Room 629, No. 101 Park Avenue, New York, N. Y.

NEW YORK, Aug. 8.—Mexico's oil production is now running at the rate of about 180,000 bbls. daily, or at the annual rate of about 66,000,000 bbls. This means that Mexico's output has dropped to a point just about equaling Venezuela's rising production, and that Venezuela will, either this year or next, pass Mexico, unless some unforeseen change takes place in the latter country.

Mexico is learning the lesson that the only manner in which crude oil production can be maintained under present known methods of development is by new drilling to offset the natural decline of old wells. At least the country appears to be "learning" in as much as a slight degree of alarm has been expressed by the Mexican press over the oil production and exportation since the publication recently of the Ministry of Finance statement which declared that a 4,000,000-peso loan had been necessary to meet the semiannual interest on the foreign debt because the revenue from oil taxes had decreased so materially. There are some in Mexico who understand finance better than the right and wrong of the oil law controversy, and the best argument toward encouragement of production may be the demand for cash.

Position Unchanged

But Mexico is believed to be far from having reached a point of receding from the stand on oil, so far as the present administration is concerned. Therefore, no immediate change for the better in the oil situation may be expected.

When the controversy over the oil laws started, with crude oil production at a high rate and the oil taxes pouring ing into the government treasury in a gratifying stream, certain Mexican citizens attempted to go direct to the American people and show that the petroleum companies were unjust in demanding the recognition of rights to property acquired before the 1917 Constitution went into effect, as well as for equitable taxation. The Government of the United States, however, backed up the oil companies in their just demands and since that time the situation has been in a deadlock, with the Mexican Government enforcing its new petroleum laws and the oil companies declining to forfeit deliberately what they believe to be their rights in the matter. While the Government can restrain new oil operations, it has no power to force the companies to operate under the new laws. What the companies have been doing, therefore, is merely operating their old properties with practically no new drilling. The production of these old properties has had a natural gradual decline, and no new areas have been developed to offset it.

Prospective Area Large

The oil companies which have had the greatest share in Mexico's oil development to date have more prospective, undeveloped acreage in Mexico than they ever have developed to date. Practically the entire area from the Tuxpam River south to the Guatemala border is under lease, including the Isthmus of Tehuantepec; in addition, large blocks of acreage have been taken up just south of the Rio Grande. Perhaps a half dozen wells are going down on all this reserve acreage at the present moment, maybe less. At least the amount of work being done is calculated to be wholly inadequate to test the area. Some of the few tests that have been drilled, however, have had interesting shows of gas or oil.

Before the Mexican Government indicated that it was going to try to enforce new regulations which the oil companies believe unjust, a tremendous wildcatting campaign was under consideration, involving the expenditure of between $10,000,000 and $20,000,000 for wildcatting alone. Some American concerns had already voted heavy expenditures, but they were withdrawn when conditions took an unfavorable turn. Since then not only have these reserves been idle, but refineries, pipe lines and terminals have been dismantled, and the Mexican oil industry reduced to a mere shell of its former self. Ironically enough, one coastal refinery is being operated on crude oil imported from Venezuela.

Present Production

The actual production of crude oil in Mexico today, by companies, is approximately as follows (daily averages in barrels):

	Light	Heavy	Total
Mexican Petroleum	25,000	40,000	65,000
Mex. Eagle Oil	12,000	150	12,150
Standard of N. J.	2,000	10,000	12,000
Corona (Royal Dutch)	1,000	10,000	11,000
Mex. Seaboard	2,000	9,000	11,000
Sinclair Oil	750	17,000	17,750
Atlantic Gulf Oil	2,000	.....	2,000
Gulf Oil	5,000	8,000	13,000
Mex. Natl. Rys.	....	3,000	3,000
The Texas Company	7,500	500	8,000
Penn Mex. Fuel	5,500	.....	5,500
Miscellaneous	3,000	18,000	21,000
Total (daily)	65,750	115,650	181,400

The daily average production approximately a year ago was 225,000 bbls.

Mexican Press Alarmed

Led by editorials of "Excelsior" the newspapers of Mexico City issued an appeal for modification of the Mexican petroleum laws in order that the petroleum industry might once more thrive. Only slight changes in the legislation are necessary to permit the increase in production, the papers declared, citing the instance of the Mexican Gulf Oil Co. which was one of the "outlaw" companies which refused to comply with the new laws. Since its defiance it has been unable to secure operation permits and its production has dwindled decidedly.

Propaganda that the heavy rains recently experienced in the Tampico district have caused the decrease in the oil output was declared false, the papers asserting the minimum production in oil is due to the recent statutes. The financial situation is in the hands of the petroleum companies, they said, pleading for modification to increase the incoming revenue.

Two closely allied phrases expressed in the "Excelsior" show the attitude of

(Continued on Page 86)

Reputation

The costly, long-drawn out process, which was necessary to establish NEWTON ABSORPTION GASOLINE PLANTS in the estimation of gasoline manufacturers has proved to be the *most profitable*, and at the same time, the *shortest* route to the Industry's Good Will.

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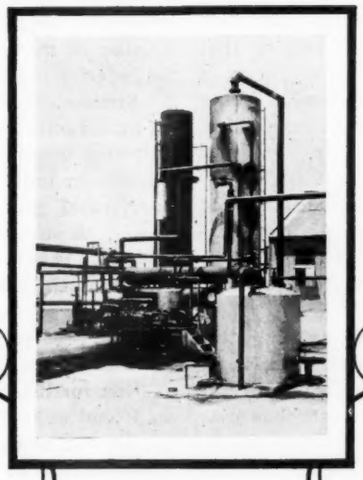

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MANUFACTURING COMPANY

FULLERTON, CALIFORNIA

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RESEARCH FINDS NEW OUTLETS

Oil producers and refiners have their overproduction troubles but they can curtail their output. The natural gasoline industry, on the contrary, has no control over its supply.

The oil producer can shut in his wells and in many cases get them back. The refiner can reduce his runs to suit the demand. But the natural gasoline manufacturer cannot cut down his supply ordinarily without actual waste. He has contracted to take care of the casinghead gas from wells drilled by others and to that extent the control is out of his hands.

He is hedged in on one side by control of production being lodged elsewhere and on the other by the necessity for conservation which will not permit him to waste surplus gas in the air.

There was a time before conservation of gas became so imperative when the natural gasoline manufacturer waited until a field was on a settled basis before entering it but now that flush production as well as settled is sought the situation is vastly complicated. There is an increase in natural gasoline output of over 20 per cent this year above last year's production.

Owing to overproduction in oil production and refining this much larger supply of natural gasoline has not been readily absorbed by the present outlets and the result has been one of the lowest-priced periods the natural gasoline manufacturer has ever encountered, probably representing, so far this year, a loss to the industry as a whole.

The natural gasoline manufacturer has been further handicapped in that in addition to having no control of his output he had no control of his existing outlets. He was helpless alike in manufacturing and marketing.

His product was not a finished motor fuel, but was used as a blending material to secure a finished motor fuel. This meant that his market depended upon the attitude taken by those who purchased natural gasoline for blending purposes. If the refiner did not wish to use natural gasoline he could make a finished gasoline for motor fuel without it.

Instead, however, of bewailing these conditions the natural gasoline industry set itself to develop new markets for its products. It called in the aid of scientific research and found after a year or two's labor that by proper methods of manufacture it could produce a product that is suitable for motor fuel without being blended with any other material.

This research on the part of the Association of Natural Gasoline Manufacturers and individual companies succeeded in perfecting means of manufacturing a finished motor fuel of exceptional value. In other words, they have developed a direct consuming outlet for their product which means that as they develop it they will become more independent and in control of their own market.

This, it is observed, may be just a starting point.

In blending they have shown that for present motors natural gasoline is an aid in starting and acceleration and that natural gasoline obtained from many fields has valuable antiknock properties.

They have also shown that greater quantities of natural gasoline can be used in blending with refinery gasoline to secure a finished motor fuel without any sacrifice of desirable characteristics.

In the by-product line the natural gasoline industry is now engaged in research work to determine the possibility of using certain fractions of natural gasoline as an enrichment mixture for coal and water gas. It is possible to use certain fractions in homes for heating. Another discovered utilization is as a solvent.

These are some of the evidences of benefits already derived from a course of systematic and co-operative research into the development of new markets and the enlargement of existing outlets for the products of the natural gasoline industry.

It is entirely possible that within the next three or four years present ideas as to what constitutes a good motor fuel may be revolutionized due to changes in motor design. If the natural gasoline industry continues its research work and keeps pace with these changes it could be in position to profit immensely by enlarged markets for its special product.

It now appears possible that as a direct result of that research work its product is to be particularly adaptable for use in certain types of motors, especially for airplanes, while with the changes under way in the design of motors for automobiles it is likewise probable that this product will have special demand as a motor fuel for the new types of automobile engines.

If this expectation is realized the natural gasoline industry will have paralleled the experience in the cracking operations in refining. Cracked gasoline was at one time considered merely a cheap substitute for real gasoline, but as a result of research and the perfection of manufacturing methods, what was formerly considered an inferior product was developed into a superior motor fuel.

Similar enterprise and energy in research and in the perfection of manufacturing processes seems likely to lift the natural gasoline industry out of the slough and at the same time benefit the entire petroleum industry.

Natural gasoline cannot be ignored. Conservation forbids its waste. A surplus of natural gasoline inevitably affects the general market. If a market can be developed for that surplus for special purposes the whole gasoline market will be strengthened to that extent.

The greater proportion of the natural gasoline will continue to be used in the present outlets but the development of a profitable market for the surplus will remove it from the class of a by-product and tend to stabilize the whole petroleum industry.

At the same time it will be another demonstration of real conservation by the oil industry which is continually making advances in conserving waste into profit while its critics are merely talking about it.

It is an encouragement to everyone engaged in the manufacture and distribution of petroleum products.

No branch of the petroleum industry was in a seemingly more helpless position than was the natural gasoline industry when the present period of overproduction developed.

When the oil industry looks over the record and sees what wonders have been wrought by scientific research, notably the evolution of cracking, the air lift in production, geophysical tests in the fields, and the two or three hundred uses for petroleum products already developed, it should be impressed, as the natural gasoline industry has been, with the possibilities of research in finding new uses and new markets for its surplus production.

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DOMINATE

Hendricks Well Makes 245 Bbls. Hourly

Winkler County Pool Operations Increased. Two 100-Bbl. Wells in Church-Fields Pool, Crane County

By C. D. Lockwood
Staff Correspondent, North and West Texas

FORT WORTH, Tex., Aug. 8.—A 245-bbl. an hour well in the Hendricks Pool of Winkler County and two 100-bbl. an hour gushers in the Church-Fields Pool of Crane County featured the production news of West Texas during the past week while the daily average output of the district climbed a little higher to a new peak of 141,825 bbls. from 918 wells, an average of 154.5 bbls. per well.

The big producer is Pure Oil Co.'s No. 1 Hendricks, SW cor., Section 41, Block B-5, north offset to the Gulf Production Co.'s No. 1 Hendricks and east offset to the discovery well. It topped the pay at 2,837 feet and when drilled in 1 foot flowed 735 bbls. in the first three hours and was then pinched in to 20 bbls. an hour because Southern Crude Oil Purchasing Co. will take only 400 bbls. a day.

Five of the 13 West Texas locations announced this week were made in Winkler County and a new pipe line was started from the Hendricks Pool to the Texas & Pacific Railroad at Wickett. These five locations are shown on the accompanying wildcat report, one being an east offset to Southern Crude's north extension producer, two of them semiwildcats a quarter mile west of that well, and another offsetting the Murchison-Marland drilling well a mile east of the pool. Only one is a rank wildcat test, the Amerada Petroleum Corp.'s No. 1 J. B. Walton, in the SW cor. NW, Section 48, Block 26, about 4 miles northeast of the field.

The Amerada Petroleum Corp., subsidiary of Republic Production Co., has pipe on the ground for a 6-inch line from the field to Wickett on the T. & P., which is also the terminus of the Southern Crude line. Four 55,000-bbl. tanks are being built at Wickett and the American is said to be soliciting connections at 60 cents a barrel. Southern Crude, Gulf and Independent are the only companies which have production in Winkler County at present, although a number of smaller concerns and individuals hold good-looking acreage which should prove productive.

Texon Oil & Land Co.'s No. 1 Hendricks, SW cor. SE, Section 41, continues to drill ahead without result. Monday it was down 2,723 feet, or 403 feet in the lime.

Plan More Storage

Landreth Production Corp. is reported to be planning the erection of two 80,000-bbl. tanks on its lease in Section 45, Block 26.

Southern Crude's No. 1 Hendricks-A, north of the field, was drilling at 2,958 feet Monday with a flat hole. The latest gauge was 167 bbls. for Sunday and the well flowed 170 bbls. Saturday. It has had no further encouragement since it topped the pay at 2,930-31 feet, a couple of weeks ago and flowed 912 bbls.

Humble Oil & Refining Co.'s south offset to the Texon test, was drilling at 2,590 feet Monday. Gulf Production Co.'s No. 3 Hendricks was still fishing bit at 2,357 feet; No. 4 topped the brown lime at 2,546 feet and was drilling up underreamer lugs at 2,553 feet; No. 6 was making 1,000,000 feet of gas at 2,492-2,556 feet and was temporarily shut down along with Nos. 5 and 7.

In the northeastern part of Winkler County, R. S. Matthews' No. 1 Cowden topped the salt at 1,623 feet with surface elevation of 3,120 feet. This makes the salt plus 1,497 feet or 284 feet below the Carter & Zweifel dry hole across the line in Andrews County.

Waddell Opens New Field

The new Waddell discovery in Crane County made a couple of flows during the past week. August 5 it made 36 bbls. in a couple of heads with total depth 3,231 feet and the next day flowed 50 bbls. at 3,247 feet. The first showing of oil came at 3,194-3,200 feet and the top of the pay is 3,219 feet. Two 500-bbl. tanks were set and the well connected up August 4. Monday the total depth was 3,254 feet in soft lime with no increase in oil. Regardless of the ultimate caliber of this test it seems to have opened a new field. Gulf Production Co. owns everything within a radius of 2¼ miles and some additional acreage besides, totaling 56 sections.

Gulf Production Co. brought in six wells along the north end of its McElroy block in Crane County, adjoining the Landreth strip this week, the six having a combined initial output of 8,482 bbls., or 1,413 bbls. per well. Its No. 17 J. T. McElroy was good for 410 bbls. after a shot of 160 quarts at 2,795-2,905 feet; No. 20 flowed 432 bbls. naturally at 2,929 feet with top of pay at 2,802 feet; No. 21 was shot with 200 quarts at 2,819-2,924 feet and flowed 122 bbls. the first hour; it flowed 1,330 bbls. by heads before the shot, top of pay being 2,816 feet; No. 22 flowed 1,400 bbls. naturally, increasing to 120 bbls. the first hour and 100 bbls. the second hour following a shot of 180 quarts at 2,798-2,929 feet; No. 23 flowed 49 bbls. an hour at total depth of 2,870 feet, after a shot; and No. 24 which was shot with 155 quarts at 2,746-2,859 feet was flowing 40 bbls. an hour while fishing tools lost in the hole. No. 26 topped the brown lime at 2,720 feet; No. 27 at 2,713 feet and No. 28 at 2,701 feet.

Drilling Summary

At the close of last week there were 134 completed oil wells and 70 drilling operations in the Church-Fields-McElroy Pool, 26 of the latter being already below 2,000 feet; and the average initial production per well still remains above 1,000 bbls.

Out of 25 active operations in the Hendricks Pool of Winkler County, 8 were shut down or standardizing and 7 others were below 2,000 feet, while 7 wells were producing.

Following is a tabular resume of operations in these two most important West Texas fields:

	Hendricks	Church-Fields-McElroy
Locations	2	1
Rigs	6	15
Drlg. less than 1,000 ft.	1	3
Drlg. 1,000-2,000 ft.	1	5
Drlg. below 2,000 ft.	7	26
S.D. or standardizing	8	3
Oil wells not completed	0	12
	25	70

Magnolia Petroleum Co. is shipping in four new 55,000-bbl. tanks for use in the Church-Fields Pool where the company already has one of that size. They will all be located in the SW, Section 44, Block 30. Simms and Atlantic have four 55s already built and are building four additional in this field and also are contemplating four others. These two companies together have more than 20,000 bbls. daily production in Church-Fields, of which amount the Humble Pipe Line Co. will take only half. That will call for the construction of one 55,000-bbl. tank every five days as long as the proration lasts, which will be at least until September 15 or October 1 when Humble expects to have its 10 and 12-inch line from McCamey to Corpus Christi in operation. The line is now 75 per cent completed.

Landreth Production Corp.'s No. 10 State-Cowden-Anderson flowed 65 bbls. August 5 and 16 bbls. the next day at 2,992 feet. Landreth's production Saturday was 5,735 bbls. Simms and Atlantic's No. 6 University-D was shot with 300 quarts at 2,835-2,971 feet and as a result flowed 572 bbls. in 16 hours.

A well in Reeves County had a good gas showing. This is Humble Oil & Refining Co.'s No. 1 Kloh-B, which had 2,000,000 feet of gas at 3,697-98 feet and was drilling ahead.

Pecos County Extension

In Pecos County, California Co.'s big extension to the Yates Pool, No. 1 Yates, flowed 839 bbls., 793 bbls. and 745 bbls. in the three days ending August 4. This production was made through a three-eighths-inch choke, however. McMan and Marland's No. 1 Yates, northwest of this well, finally topped the lime at 1,224 feet, about 100 feet lower than the California well, and after cementing the 8-inch at 1,227 feet started drilling ahead Monday.

Mid-Kansas and Transcontinental's No. 5 Yates-A, east offset to No. 1 Smith-Taylor, which was reported last week flowing 90 bbls. an hour, increased to 100 bbls. an hour at 1,251 feet and was drilled to 1,272 feet. Top of pay was 1,220 feet.

Mid-Kansas and Transcontinental have made two more locations for extension tests to find out how far this wonder field is going to produce. No. 4 Yates-B is a quarter mile north of No. 2 Yates-B, being 1,273 feet east and 250 feet south of NW cor. Section 61. The first well drilled by these companies south of the discovery will be No. 1 Yates-D, 1,320 feet from the north line and the same distance from the most westerly east line of Section 31, Block 194, G. C. & S. F. Survey.

The Humble Pipe Line Co.'s 8-inch line from the Yates Pool to Kemper in Reagan County has been completed for about 10 miles.

Another gusher in the freak Sibley area of Eastland County, good wells in the Grosvenor district northeast of the Fry Pool in Brown County, and an excellent producer in Callahan County featured the week in North Central Texas.

Mook-Texas Oil Co.'s No. 4 Sibley, in SW, Section 8, W. Van Norman Survey, drilled into the sand at 3,063-65 feet and flowed 75 bbls. the first hour, 85 bbls. the second hour and 95 bbls. the third hour. It made 2,160 bbls. the first 24 hours. The crude tests 42 degrees gravity and there is 3,000,000 feet of gas with it. Mook-Texas Oil Co. owns 900 acres in this part of Eastland County. This well is near the freak No. 3 Minnie Sibley, owned by the same company, which looked like a gusher for several hours and then went dead and has since averaged about 60 bbls. on the pump.

Northwest of this well, States Oil Corp.'s No. 2 Sibley topped sand at 3,059-60½ feet and is shut down for storage. It sprays about 7½ bbls. an hour with approximately 10,000,000 feet of gas. United Producers Pipe Line Co. is taking this oil while Prairie is hooked up to the Mook-Texas producer.

Callahan County's good well also belongs to Mook-Texas Oil Co. This is its No. 2 Baum in the SE part of the G. M. Vigal Survey. It flowed 220 bbls. at 1,667-85 feet.

Eastland County

In Eastland County, C. H. Huddleston's No. 1 U. U. Fox, located on the south line of Lot 67, McLennan County school land Nos. 3 and 4, topped a gas sand at 1,307 feet and at 1,325 feet was

WILDCAT OPERATIONS IN WEST TEXAS

Week ending August 6, 1927

Company, Farm and Location—	Remarks—
ANDREWS COUNTY	
Calvin & Belt's No. 1 Ratliff & Bedford, C NE Sec. 16, Blk. A-54	Shut down for water 350 ft.
J. S. Cosden's No. 1 Ratliff & Bedford, C SE Sec. 8, Blk. 73, Public School Land	Drilling 410 ft.
Sartain Oil Co. et al's (was Deep Rock Oil Co.'s) No. 1 W. J. Harris, C SE Sec. 12, Blk. A-46, Public School Land, elev. 3,167 feet	Fishing tools 340 ft.
B. B. McKennon's (was Neff et al's) No. 1 J. S. Means, C SE Sec. 12, Blk. A-35, Public School Land	Running 15-in. 260 ft.
A. G. Carter & Zweifel's No. 1 Cowden, C SE Sec. 18, Blk. A-52, Public School Land Sur., elev. 3,156 ft.	Top salt 1,375 ft.; shut down for orders 3,500 ft.
BREWSTER COUNTY	
Van McPhail's No. 1 McIntyre, SE cor. Sec. 59, Blk. 352, 7 mi. S of Alpine	Drilling 615 ft.
Wilcox & Anderson's No. 1 Gage, Sec. 5, Blk. 300, T. C. R. R. Sur.	Drilling 180 ft.
COKE COUNTY	
W. H. Brown et al's No. 1 W. L. Foster, SE cor. Sec. 142, Blk. 2, H. & T. C. Sur.	Spudded 5 ft.; drilling water well.
Danciger O. & R. Co.'s No. 1 Mrs. Byrnes, Clinton Sur.	Shut down 602 ft.; casing on ground.
Lipan Oil Co.'s No. 1 S. M. Conner, Sec. 71, Blk. 2, H. & T. C. Sur.	Shut down 1,215 ft.
CONCHO COUNTY	
Associated Oil Co.'s No. 1 Sam Waring, Sec. 2,035, J. W. Godhardt Sur.	Set 8-in. 2,145 ft.
The Exploration Co.'s No. 1 Hartgrove, Blk. 240, J. Schouch Sur., Elev. 1,718 feet	Fishing casing 1,930 ft.
CRANE COUNTY	
Gulf Production Co.'s No. 2 Waddell, NE cor. Sec. 10, Blk. B-25, elev. 2,741 ft.	Top brown lime 3,068 ft.; set 6-in. 3,077 ft.; top gray lime 3,095 ft.; first oil 3,194-3,200 ft.; top pay 3,219 ft.; drilling 3,254 ft.; flowed 50 bbls.
CROCKETT COUNTY	
George Anderson and Marland Oil Co.'s No. 1 University	Drilling 700 ft.
V. T. Bolin & Co.'s No. 1 P. C. Coates, NW cor. SW Sec. 4, Blk. 2, I. & G. N. Sur.	Shut down 2,110 ft.
Corbett & Gill's No. 1 Todd	Building rig.
Corbett & Gill's No. 1 University	Building rig.
Gulf Production Co.'s No. 2 Powell-D	Fishing bit 350 ft.
Gulf Production Co.'s No. 1 G. L. Thompson, SW cor. Sec. 71, Blk. 1, I. & G. N. Sur.	Rigging up machine.
Epeneaur et al's No. 1 Noelke, SW Sec. 30, Blk. GG, G. C. & S. F. Sur.	Spudded and shut down.
George A. Henshaw and Geyer Oil Co.'s No. 1 Noelke-Murphy, 660 ft. S and E of NW cor. Sec. 10, Blk. PP, T. C. Ry. Sur., A-5,148	New location; moving in material.
J. K. Hughes' No. 2-B Powell, Sec. 63, E. L. & R. R. Sur., Elev. 2,783 feet	Fishing for 18 joints 8-in.; total depth 2,535 ft.; shut down.

(Continued on Page 140)

estimated to be making 5,000,000 feet of gas.

In Coleman County, Roth & Faurot's No. 1 Lewis, in the SW of Section 3, Coleman County school land, topped a sand at 1,050 feet carrying a good show of oil and gas, and the well was shut down for orders.

In Shackelford County, Sinclair Oil & Gas Co. seems to have a small well in its No. 10 Nail, located on the line between Sections 150 and 151, Block 10. When placed on the beam after a 30-quart shot at 1,515-36 feet, total depth 1,538 feet, it was estimated good for 30 bbls.

In the Grosvenor area of Brown County, Roxana Petroleum Corp.'s No. 1 Smith flowed 621 bbls. from sand at 1,331-46 feet with the total depth 1,347 feet in lime. This is an east offset to Forest Oil Co.'s No. 6 Smith. Selby Oil Co.'s No. 12 Ellis, a south offset, flowed 215 bbls.

South Vernon Extension

An extension of 2 miles east of the South Vernon Field, Wilbarger County, and the discovery of another gas sand in the Fain-McGaha and Roxana test in eastern Foard County were the only developments of much interest in the Wichita Falls district, although Cooke County established a new production record of 5,905 bbls., an increase of 700 bbls.

Humble Oil & Refining Co.'s No. 1 R. L. Castleberry-A, in the SE cor. of Section 67, Block 14, was the Wilbarger County extension. It topped an oil sand at 1,526-28 feet which put 800 feet of oil in the hole and the 8-inch pipe was being underreamed early this week to the top of the sand.

Fain-McGaha Oil Co. and Roxana Petroleum Corp.'s No. 1 Mathews in eastern Foard County, which pumped 60 bbls. initially a couple of weeks ago from sand at 1,484-94 feet, was deepened this week and picked up another gas sand at 1,668-70 feet. It carried 1,000,000 feet of gas but no oil. However, it has been drilled in only 2 feet.

WICHITA FALLS DISTRICT

Archer County

King, Corlett & White's No. 1 Wilson-D was dry and abandoned at 1,550 feet. Plains Production Co.'s No. 1 Wilson had an initial production of 125 bbls. from sand at 1,527-40 feet. Consolidated Oil Co.'s No. 2 Abercrombie & Taylor was dry and abandoned at 1,388 feet. Ginsberg and associates' No. 1 Carvey was dry and abandoned at 902 feet. Empire Holding Corp.'s No. 6 Barry, Jr., was dry and abandoned at 3,010 feet.

Brown County

Location was abandoned for Arkansas Fuel Oil Co.'s No. 1 Thomason. Barbara Oil Co.'s No. 1 Miller was shot with 10 quarts at 1,130-43 feet and had an initial production of 50 bbls. Bowers and associates' No. 3 Cason, Sr., was dry and abandoned after three shots. Charter Oil Co.'s No. 2 Byler-H made 325 bbls. initially at 1,316-35 feet. Empire Gas & Fuel Co.'s No. 1 Leslie was dry and abandoned at 1,698 feet. Gibson Oil Corp.'s No. 18 Shore made 25 bbls. initially from sand at 1,252-60 feet. No. 19 on the same lease made 30 bb's. initially after an 8-quart shot at 1,247-61 feet. Hervey and associates' No. 1 Eubanks was dry and abandoned at 2,006 feet. Humble Oil & Refining Co.'s No. 20 Hickman was shot with six quarts at 1,209 to 1,221 feet and made 23 bbls. initially. Same company's No. 21 Hickman was shot with four and one-half quarts at 1,208-18 feet and made 9 bbls. initial. Humphrey Brothers' No. 1 Cavel is a 5-bbl. well at 1,300-02 feet. Location was abandoned for Selby Oil & Gas Co.'s No. 7 Ellis. Wentz Oil Corp.'s No. 1 Mitcham was dry and abandoned at 1,367 feet. Wentz Oil Corp.'s No. 28 Shore made 125 bbls. initial from sand at 1,320-30 feet. Mexana Oil Co.'s No. 1 McCormick was dry and abandoned at 1,301 feet.

Callahan County

Bradstreet's No. 1 Waller made 210 bbls. initial from sand at 1,683 to 1,708 feet after a 20-quart shot. Milham Corp.'s No. 1 Warren was dry and abandoned at 3,502 feet. Vacuum Oil Co.'s No. 1 Evans was dry and abandoned at 2,395 feet. White Eagle Oil & Refining Co.'s No. 1 Hall was dry and abandoned at 2,365 feet.

Comanche County

Suddereth and associates' No. 1 Chapman was dry and abandoned at 2,006 feet.

Cooke County

Chapmand & Lanier's No. 3 Montgomery was dry and abandoned at 1,547½ feet. Gray and associates' No. 1 Public Park had an initial output of 125 bbls. at 1,586 to 1,604 feet. Kewanee Oil & Gas Co.'s No. 3 Dennis-A made 320 bbls. initially from sand 1,273-82 feet. Lynch Stahl and associates' No. 2 Koelzer made 77 bbls. the first 11 hours from sand at 1,638-69 feet. Oil Operators Trust Co.'s No. 6 Kleiss pumped 50 bbls. initial from sand at 1,587 to 1,615 feet. Roxana Petroleum Corp.'s No. 3 Walterschied pumped 105 bbls. of oil and 5 bbls. of salt water from sand at 1,706-32 feet after being plugged back from 1,736 feet. Sun Oil Co.'s No. 2 Hacker made 80 bbls. initial from sand at 1,624-41 feet. The Texas Company's No. 3 Dennis made 583 bbls. initial from sand at 1,263-74 feet. The Texas Company's No. 1 Hacker was completed at 1,607-51 feet making 65 bbls. initial.

Eastland County

Barkely and associates' No. 1 Barton was dry and abandoned at 1,346 feet. Cranfill & Reynolds' No. 4-B Collins is a 3,500,000-foot gas well at 827-36 feet. The Texas Company's No. 16 Hightower made 27 bbls. initial at 1,197 to 1,207 feet. Empire Gas & Fuel Co.'s No. 2 Bishop was good for 23 bbls. at 3,022 feet. McBride's No. 1 Johnson has been temporarily abandoned at 2,838 feet.

Montague County

Continental Oil Co.'s No. 2 Maddox is a 20-bbl. well at 924-37 feet. Humble Oil & Refining Co.'s No. 6 Howard was dry and abandoned at 1,779 feet. The Texas Company's No. 13 Maddox-D made 20 bbls. at 925-40 feet.

Shackelford County

Hope Petroleum Co.'s No. 19 Reynolds was dry and abandoned at 1,535 feet. Stalker Oil Co.'s No. 2 Goodwin was temporarily abandoned. Terry and associates' No. 1 Hadley was temporarily abandoned.

Stephens County

Hart Oil Corp.'s No. 1 Magers was dry and abandoned at 3,965 feet. Seaboard Oil & Gas Co.'s No. 1 Tarrant was temporarily abandoned at 1,976 feet.

Wichita County

Duncan & White's No. 1 Nitschke was junked at 752 feet. J. W. Hooser's No. 7 Mitchell-B was temporarily abandoned at 1,889 feet. Consolidated Oil Co.'s and Cosden's No. 8 Waggoner, Section 57, made 50 bbls. initial at 1,219-41 feet. Consolidated Oil Co. and others' No. 1 Waggoner, Section 2, was dry and abandoned at 2,203 feet. Phillips Petroleum Co.'s No. 4 Waggoner-L made 62 bbls. in 20 hours after being plugged back from 2,407 to 2,311 feet. Oil sand was found at 2,297 to 2,302 feet.

Young County

Roxana Petroleum Corp.'s No. 4 Payne and others made 16 bbls initial from sand at 2,096 to 2,104 feet. Sun Oil Co.'s No. 2 Davis estate made 465 bbls. initial at 3,341-60 feet.

WEST TEXAS

Crane County

Pecos Oil Co.'s No. 4 University flowed 292 bbls. after a 260-quart shot at 2,793 to 2,865 feet, total depth 3,005 feet. Humble Oil & Refining Co.'s No. 11 University flowed 250 bbls. from 2,870 to 2,915 feet. Simms Oil Co. and Atlantic Oil Producing Co.'s No. 6 University-C was the best well completed during the week when it made 1,956 bbls. initial from 2,805 to 2,930 feet. Same operator's No. 3 University-D was shot with 160 quarts at 2,820 to 3,002 feet and made 795 bbls. the first 14 hours.

Howard County

Magnolia Petroleum Co.'s No. 2 Sloan Chalk made 30 bbls. initial at 1,177-90 feet.

Mitchell County

California Co.'s No. 9 H. C. Miller was shot with 300 quarts at 2,960 to 3,073 feet and made 159 bbls. the first 16 hours.

Pecos County

Simms Oil Co.'s No. 1 A. J. Devlin was dry and abandoned at 1,455 feet. California Co.'s No. 1 I. G. Yates started off making 400 bbls. per hour and 30,000,000 feet of gas at 1,023 feet and was pinched in making 745 bbls. daily through a three-eighths inch choke.

Reagan County

Big Lake Oil Co.'s 89-A University flowed 320 bbls. initial at 2,987 to 3,020

(Continued on Page 137)

Late News from the Fields

OKLAHOMA

The Greater Seminole area produced 484,038 bbls. on Tuesday of this week from 674 wells. The output by pools was:

Bowlegs	162,504
Little River	10,260
Earlsboro	205,656
Seminole	75,585
Searight	30,087
Total	484,038

The most important completion of the day was the Independent Oil & Gas Co. and Margay Oil Co.'s No. 1 Gaines, SE cor. NE NE Section 11-9-5, which is flowing 135 bbls. an hour from Wilcox sand 4,268-4,272 feet. This well is a half mile south of the Twin State Oil Co.'s Sango lease, which is productive, and the space between these two leases will be dotted with rigs. It is estimated that 20 wells will be started as a result of the new Independent-Margay well.

Phillips Petroleum Co.'s No. 1 Gram, SE cor. NW SE Section 9-9-5, is flowing 1,200 bbls. from Wilcox sand 4,310-4,324 feet.

Midland Oil Co.'s No. 2 Wise, NE cor. SE NW Section 23-8-6, made 470 bbls. the first 24 hours on air from sand 4,339-4,357 feet.

WYOMING

CASPER, Wyo., Aug. 9.—Midwest Oil Co.'s No. 13-L, Section 27-47-9, Salt Creek Field, Wyoming, completed at 2,440 feet flowed 2,071 bbls. naturally. Marland Oil Co. and Producers & Refiners have contracted to drill a second test on the north end of Baxter Basin anticline, Sweetwater County, Wyoming, on location not yet selected but near the recent test by the same interests which developed gas near a fault, the gas being a different quality from that found elsewhere in this gas field, the object being to seek a possible oil horizon.

WEST TEXAS

FORT WORTH, Tex., Aug. 9.—The Yates Pool of Pecos County was extended 1¼ miles northwestward by McMan and Marland's No. 1 Yates in Section 34½, Block 194, just northwest of the NE cor. of Section 35. Its first show was 1,231-47 feet, increasing at 1,269-73 feet and started flowing by heads at 1,278 feet. At total depth of 1,284 feet it was flowing 20 bbls. an hour and making 1,000,000 feet of gas. This well gives the Yates Pool a length of 3½ miles.

Mazda Oil Co.'s No. 1 Smith, located 2½ miles southwest of the Yates Pool, struck some heavy black oil at 1,468 feet and was shut down at 1,472 feet.

In Winkler County, McCulloch Oil Co.'s No. 1 Morton, south of the Hendricks Pool, topped salt at 2,100 feet and was drilling at 2,200 feet. Southern Crude's No. 4 Hendricks-C had 3,000,000 feet of gas at 2,720 feet and made 1½ bbls. of oil at 2,735 feet. Its cable tools were then torn down and moved to the company's No. 1-T-88-B, in Section 4, Block B-12. Texon's test was drilling at 2,740 feet, Tuesday.

COLORADO

DENVER, Colo., Aug. 9.—Texas Production Co.'s No. 3 Belle Dennis, Section 8-6-86, Tow Creek Dome, Routt County, Colorado, found the Dakota sand water bearing at 3,662 feet. This test is headed for the Sundance sand which has not been drilled on this structure. All of the nine producing wells on Tow Creek are producing from shale above the Dakota which carried water in all tests so far drilled to that horizon. Texas Production Co.'s No. 2 Emerald, Section 31-2-103, Rangely Dome, Rio Blanco

(Continued on Page 138)

BLOOMFIELD PRODUCER AT 987 FEET; HOSPAH AND MANCOS RIVER TESTS

By Special Correspondent

FARMINGTON, N. Mex., Aug. 6.—Another producing well in the shallow sands and progress being made in all the drilling wells are the principal features of the oil field this week. While reports have not been so reassuring from the Hospah district, the various tests going on in that section are almost certain to bring in a number of new producers, while the Mancos River structure after investigation is believed to warrant the installation of a small refinery.

The T. C. N. Oil Co. well on the Ed Lanier permit in the Bloomfield district, Section 9-29-11. is drilled out and closed in and the pressure test of gas shows a marked increase over the first measurements and is now approximately 300 pounds. The second well will be started within 30 days, it is announced.

R. M. Smith, operating on the Abrams tract in the Bloomfield district, has passed the boulders and was drilling below 100 feet at the last report.

Kane Brothers, operating in the Bloomfield district, have spudded a well about a quarter mile east of the post office and are drilling at a depth of 135 feet.

The Huerfano Oil oC., operating in the Bloomfield district, south of the San Juan River, Section 25-29-11, after a short delay awaiting casing and the adjustment of other matters, is running casing at a depth of 600 feet and expects to drill in as soon as the pipe is set. It is not certain that the next sand will produce, but on account of the gas and oil showings in the well at present this precaution is taken.

The Mid-Continent Oil Co., operating in the Bloomfield district, Section 14-29-11, in No. 1 Ransom, encountered a producing sand at a depth of 987 feet. A test was made with the bailer that showed a production of approximately 10 bbls. per day. After this the well was drilled a little deeper into the sand and this increased the gas flow considerably. Preparations are being made for storage when a pump test will be made. C. L. Wendt, the president of the company, has left for Denver.

The Kansas-Colorado Oil Co., operating on the Atteberry tract, Section 24-31-11, has its new rig on the ground and is about ready to begin deepening the hole which was bottomed at 1,370 feet when it was determined to change rigs.

The San Juan Petroleum Corp., operating on the J. M. Palmer tract, Section 17-29-13, has decided to put in a heavier rig on the hole and go deeper and move the rig that was used to carry the hole to its preesnt depth to a new location and put down another well.

The Williams well No. 4 on the Bowman permit, Section 30-30-15, in the Meadows, has been cemented in for some time but owing to the fact that the well in the Hospah district was giving trouble in getting a water shut off, it has not been drilled in. It is expected this well will be drilled in as soon as the Hospah well is completed.

The Coon-Moore well, on the Bert Hall tract, 2 miles south of the town

(Continued on Page 129)

Oklahoma Panhandle Gets Attention

Good Well in McIlroy Pool. Texas Panhandle Production Drops. Some Producers Pressed for Storage

By James H. Dameron
Staff Correspondent, Texas Panhandle Fields

AMARILLO, Tex., Aug. 8.—Panhandle was without sensational happenings during the past week but numerous developments of importance and interest enlivened the report from the field. Production continues its decline and a few producers are hard pressed for field storage. First reports for the week were few in number as they have been for several weeks showing the inclination of operators to continue the curtailment program instituted several months ago when national overproduction undermined the Panhandle crude market.

Wildcats at either end of the Panhandle Field failed to make sensational developments but both are being closely followed. The Texas Company's No. 1 Gideon Bell, Section 71, Block 13, H. & G. N. Survey, Wheeler County, is a closely followed test. It is 10 miles southeast of production. Late in the week the well swabbed 40 bbls. in eight hours from granite wash pay at 2,145-55 feet. Elevation of the well is 2,275 feet and it is to be drilled deeper in search of more production.

Several weeks may elapse before Deep Rock Oil Co.'s No. 1 Lyman and Balfour, Section 9, Block 2, G. & M. Survey, Hartley County, is thoroughly tested. The test had a showing at 3,648-50 feet but encountered a small amount of water at 3,660 feet and was shut down at 3,670 feet.

The hole from 2,140 feet on down is open and is caving badly. Six and five-eighths-inch pipe is being hauled to the location and soon as cavings are cleaned out the casing will be run to cut off the water showing and the test deepened. Bottom of the hole is 70 feet above sea level. The water showing is reported to be slowly exhausting itself.

Wildcat Operations

Few of the other wildcats in the Panhandle proved interesting during the week. In Moore County, Moore County Oil Co.'s No. 1 Sneed, Section 30, Block 6-T, encountered a little water at 3,351 feet but is drilling ahead. Prairie Oil & Gas Co.'s No. 1 Landergin, League 310, in Oldham County, had the top of the lime at 3,760 feet and is a hole full of water at 3,606 feet. The water was encountered in a dolomite formation. In King County, California Co.'s No. 1 Spikes farm No. 2, had a show of gas at 1,980-90 feet and at 2,085 feet the test tested 6 bailers of salt water per hour. The well is being drilled deeper.

Three wildcats in as many counties, two deep tests, were abandoned during the week. A 2,600-foot test in Collingsworth County was a failure; a 3,800-foot test in Motley County was abandoned and a 3,500-foot test in Hockley County was dry. Most of the wildcat lease buying continues to be in the South Plains territory. Several hundred thousand acres are under lease in that territory and more acreage is being bought. More than a score of tests are scheduled to get under way in that territory by early fall. A couple of months ago a shallow showing was found in Hale County near Hale Center and stimulated interest there.

Oklahoma Panhandle

The Oklahoma Panhandle counties are more attractive at this time. Beaudoin and Transtex Oil Corp., Amarillo, have assembled an 8,000-acre block in northwestern Woodward County, and plan to drill a Wilcox sand test on the block. The test will probably be in the center of Section 9-23n-20w. The test is being drilled on the strength of showings found by other tests drilled in that area. A combination outfit will be used to drill the hole and a core will be taken of every screw to afford a good log. A few drilling tests in the Oklahoma Panhandle are nearing interesting depths.

It is reported the Three Way Oil Co.'s No. 1 Pierce, Section 11-1n-18e, southeastern Texas County, had a showing of oil at 2,977-90 feet. According to reports from Guymon the test had a rainbow showing at 2,742 feet and at 2,977-90 feet the bit went through sandy lime. Around 4 gallons of oil was bailed from the hole, according to the reports. Drilling was suspended and members of the crew sent to Borger to get a swab so the test could be swabbed. The well is being financed by local capital in Spearman, Hansford County, Texas.

Grady County Operations

In central eastern Gray County, Resaul's No. 1 Huselby, Section 55, Block 25, I. & G. N. Survey, was shot the second time with 140 quarts at 2,890-2,900 feet and with 110 quarts at 2,925-60 feet and with a 25-foot anchor between the shots. The test bridged 700 feet up in the pipe and the bridge is being drilled out.

Riley and Heck's No. 1 Hopkins, Section 66, Block B-2, H. & G. N. Survey, Gray County, has 600 feet of oil in the hole from 3,040-60 feet. Another Gray County test but in semiwildcat territory, is showing for a well. Majestic Oil Co.'s No. 2 Bowers, Section 93, Block B-2, topped the pay at 2,925 feet and has 600 feet of oil in the hole. The well is south of the Wilcox-Pampa Pool and in territory extended by the Majestic company, some time ago.

Gulf-Saunders Area

In the proven territories, the Gulf-Saunders area east of the Wilcox-Pampa Pool in Gray County, held most of the interest of operators. Two wells were completed in that sector during the week, the best being a 450-bbl. well. Empire Gas & Fuel Co.'s No. 1 Hood, a mile east of the discovery well and in Section 33, Block 3, was completed and averaged 280 bbls. the past week. The other completion was Roxana Petroleum Corp.'s No. 2 Worley in Section 39 which was completed as a 450-bbl. well.

Offsetting the discovery well to the west, Gulf Production Co.'s No. 2 Saunders, SW SE SW, Section 40, is spraying 125 bbls. daily from 3,075 feet. Atlantic Oil Producing Co.'s No. 1 Combs and Worley, in Section 39, was shot with 310 quarts at 2,958-3,034 feet and flowed 455 bbls. initially. During the past seven days the well averaged 356 bbls. daily. A shot failed to help Roxana corporation's No. 3 Worley, Section 39, and it is to be drilled deeper. The well was making 350 bbls. and was shot with 240 quarts at 2,890-3,080 feet and production decreased some. No new locations were announced for that area during the week.

The McIlroy Pool, in southeastern Hutchinson County, was brought back into the limelight during the week when The Texas Company got a good well in the northeast part of the pool and offsetting a small well. The Texas Company's No. 2 Cockrell, Section 1, Block Y, topped the pay at 2,821 feet and was drilled to 2,780 feet and made 465 bbls. initially. The well was deepened to 2,886 feet and made 740 bbls. the first 24 hours. Elevation at No. 2 Cockrell is 3,025 feet.

No. 2 Cockrell is a direct south offset to No. 1 Cockrell which was a 30-bbl. well. No. 1 continued to decline in production and the operating company decided to make a deep test with it. It is the second drilling deep test in Hutchinson County. Phillips Petroleum Co. is drilling one and it is below 4,000 feet. J. D. Ward and associates are preparing to drill a 4,000-foot test in Section 15, Block Y.

East of the McElroy Pool, Timms and associates' No. 1 T. D. Lewis, Section 5, Block 23, B. S. & F. Survey, was completed as a 75-bbl. well on the swab. The well started off at a much better rate but production dropped to 75 bbls. where it is hovering. The finding of oil in the area started the drilling of two or three other wells there. The Timms well has been shut down on top of the sand for several weeks waiting for pipe line connections.

Sanford Area

Prospects for the future of the Sanford area appeared brighter early in the week when Gordan and Barnes' No. 1 Sanford, Section 83, Block 46, H. & T. C. Survey, started flowing. More than 2,300 feet of oil rose in the hole in 40 minutes from pay at 2,994-96 feet and the well later made 19 small flows. It is being connected to tankage before being deepened.

The area east of the McConnell Pool in Carson looked better when Roxana corporation's No. 1 McConnell, Section 174, Block 3, just across the line into Gray County, was completed making 557 bbls. naturally. The formation at 3,183-3,264 feet was shot with 270 quarts. The well offsets production which extended the McConnell Pool.

Production of the Panhandle declined 1,940 bbls. during the week and the estimated production now is 105,185 bbls. daily. Hutchinson County declined 2,345 bbls. due principally to the natural decline of old wells. Several Hutchinson County producers are faced with an acute storage problem. Their field storage is practically full and inadequate pipe line facilities in their particular areas aggravate their problem.

Carson County declined 355 bbls. while Gray and Wheeler Counties showed gains. The flush production in the Gulf-Saunders area is bringing Gray County's production close to 10,000 bbls. daily. However, the flush in that area was not sufficient to overcome the losses in Hutchinson County. Production by counties was as follows:

Carson	9,630
Gray	9,830
Hutchinson	83,405
Moore	100
Potter	35
Wheeler	2,185
Total	105,185
Total last week	107,125
Loss	1,940

New Gas Line

Panhandle's importance in the gas industry is more pronounced daily. West Texas Gas Co., Amarillo, is planning another expansion program. During the past week that company was granted a franchise to supply gas to Midland in Midland County. The West Texas com-

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WILDCAT OPERATIONS IN PANHANDLE

Week Ending August 6, 1927

Company, Well, Farm Name, Section and Block—	Remarks—
ARMSTRONG COUNTY	
Meadows et al's No. 1 E. D. Harrell, C Sec. 100, Blk. A-6, A. & G. Sur.	Set 10-in., 1,950 ft.
United Oil & Trust Co.'s No. 1 J. P. Reck, Sec. 162, Blk. 4, H. & G. N. Sur.	Spudded and temp. abd., 298 ft.
BRISCOE COUNTY	
C. S. Rice's No. 1 J. C. Anderson, SE cor. NW NW, Sec. 22, Blk. B-3, B. S. & F. Sur.	S.D., 1,620 ft.
CARSON COUNTY	
Amatex Dev. Co.'s No. 1 E. S. Polling, Sec. 22, Blk. 2-Y.	S.R., 2,110 ft.
W. A. Gamble's No. 1-A John Dies, 30 ft N of cen., Lot 7, Blk. 11, Panhandle Townsite, Sec. 69, Blk. 2, T. T. R. R. Sur.	C.O., 1,340 ft.
Marland Oil Co.'s No. 1 Burnett-J, C NE NE, Sec. 121, Blk. 5	Small spray oil, 3,072-3,130 ft; salt water, 3,140-45 ft; dry granite wash, 3,245-88 ft; S.D., 3,685 ft; orders.
Marston Oil Co.'s No. 1 J. L. Noel	Pulling 6-in., 3,064 ft.
Navajo Oil Co.'s No. 1 E. S. Polling, Sec. 22, Blk 2-Y.	First gas, 2,120 ft; making, 30,000,000 ft; fish., 2,400 ft.
Stubblefield et al's No. 1 E. Cooper, SW cor. NE Sec. 5, Blk. 9, I. & G. N. Sur.	Fish., 2,325 ft.
Vitek Oil Co.'s No. 1 J. H. Eller, NE cor. NW Sec. 200, Blk. 3	S.D., 720 ft.
CASTRO COUNTY	
Colorado O. & R. Co.'s No. 1 M. Slemmons, SW cor. Sec. 78, Blk. M-17, B. S. & F. Sur.	Rig blown down.
Mystery Oil Co.'s No. 1 J. L. Crum, SE cor. NE Sec. 333, Blk. M-6, S. K. & K. Sur.	S.D., 510 ft. for casing.
CHILDRESS COUNTY	
Brookins et al's No. 1 Mrs. Givens, 600 ft N and W of SE cor. Sec. 676, W. & M. W. Sur.	Spudded and S.D.
Continental Oil Co. & Marland Oil Co.'s No. 1 B. P. Smith, Cen. NE, Section 14, Blk. 9	Rig on ground.
Hoover & Calloway's No. 1 O. L. Tucker, Sec. 786, Haggard Sur.	Spudded and S.D.
C. L. Sloane et al's No. 1 B. P. Smith, Sur. 49, F. P. Knott lands	S.D., 2,840 ft. cor. meas; 600 ft. water in hole.
COLLINGSWORTH COUNTY	
Harmon & Deems' No. 1 Wilson (Scott), Sec. 44, Blk. 21.	Loc.; temp. abd.
COTTLE COUNTY	
Exploration Co.'s No. 1 Richards	Spudded and S.D.
Sun Oil Co.'s No. 1 Tom Burnett, C NW SE, Sec. 6, Blk. L, S. P. R. R. Sur.	S.D., 2,590 ft. for orders.
DALLAM COUNTY	
James et al's No. 1 fee, Sec. 9, 47½	Pulling 6-in; T.D., 2,865 ft.
Wood Bros. et al's No. 1 Capitol Synd., Sec. 19, Blk. 17.	6-in. 3,375 ft; S.D., 3,504 ft; S.L.M.
Marland Oil Co.'s No. 1 A. M. James, C SW W half, Sec. 21, S. H. McElreath Sur.	Rig on ground.
Marland Oil Co. et al's No. 1 Capitol Synd., Sec. 36 Blk. 18, Capitol Synd. land	Drlg., 1,640 ft.
DEAF SMITH COUNTY	
Julien & DeGrace's No. 1 Mrs. R. A. Hindley, Sec. 47, Blk. K-8	S.D., 520 ft.
Red Hill Oil Corp.'s No. 1 Barrett, Sec. 93, Blk. K-4.	S.D., 710 ft.
DONLEY COUNTY	
A. T. Drlg. Co.'s No. 1 F. E. Harington, Sec. 39, Blk. 3-C	1,200 ft. water, 3,115-22 ft; show gas, 3,140-60 ft; dry granite wash, 3,260-93 ft; S.D., 3,498 ft. for water.
DICKENS COUNTY	
Bowser Mickels et al's No. 1 Pitchford ranch, Sec. 1, Blk. 1, Sam Lazarus Sur.	S.D., 3,355 ft; corrected depth.
FLOYD COUNTY	
Explin. Co.'s No. 1 S. H. Boone, C. C. H. Johnson Sur.	Spudded and S.D.
Explin. Co.'s No. 1 Land & Cattle Co.	S.D., 246 ft. for casing.

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(DUNN TOOLAGRAM)

RUSSIA Selects DUNN Elevators

Just one of a number of single shipments of Dunn Super-Safety "Rotary Flyer" Elevators for Russia. This order consists of 250 elevators for 3, 4 and 6 inch drill pipe.
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Oklahoma Production Registers Drop

Curtailment Program Inaugurated. Two Dry Holes on West Side of Bowlegs Pool. Area Around Twin State Lease Interesting

By J. L. Dwyer
Staff Correspondent, Oklahoma Fields

With Oklahoma as a whole showing a decline in output for the first time in many weeks and Seminole registering a marked decline owing to the inauguration of the curtailment program, there was a slight ray of sunshine on the horizon in Oklahoma early this week. The Seminole area produced 481,946 bbls. on Sunday and 483,366 bbls. on Monday, and this figure includes about 15,000 bbls. of new production coming from wells completed over the week-end. The most notable well to be drilled into the sand is Skelly Oil Co.'s No. 1 Hearn, SE cor. SW NW Section 12-9-5, which is now making over 9,000 bbls. daily. This well originally made 4,000 bbls. and was shot. In shooting, the well was damaged and stopped flowing. It was cleaned out, and started flowing 510 bbls. an hour. It is now the largest well on the east side of the Earlsboro Pool. Two dry holes drilled on the west side of the Bowlegs area have brought a sharp disappointment to this side of the pool, and have stopped trading in leases and royalties in this trend. The dry holes are the McCulloch Oil Co.'s No. 3 Bowlegs, SW cor. NW NW Section 22-8-6, and the Skelly Oil Co. and Carter Oil Co.'s No. 1 McGeisey, NE cor. NE Section 31-8-6. It is too much at this time to say that the wells define the west trend of Bowlegs, but at least they will slow up operations west of the present limits of production.

The average per well of the Seminole Field is again slipping, and many students of the territory believe that the peak has been passed. The unusual performances of this field tend to cause a hesitancy about making guesses as to what may be expected of it, but unless some unusual completions are found in territories now thought to be on the edges, the peak of the field probably was touched with the 527,000-bbl. figure.

Important Territory

One of the most important regions of the field now is around the Twin State Oil Co.'s Jones lease in Section 11-8-6. There is one well on this lease and it had a natural production of 300 bbls., and was placed on the air-gas lift system and increased its output to 2,300 bbls. It is the farthest northeast well at Bowlegs, and much of the future of the field depends upon the sand condition found in wells adjoining this lease.

In Logan County, the Texas Coal & Oil Co.'s wildcat well, SE cor. NW Section 33-18-4w, set the 6-inch casing at 4,133 feet, and the total depth of the hole is 4,142 feet. The well is flowing 10 bbls. an hour of a fluid which is 25 per cent oil and 75 per cent water. The report that this well was making 1,500 bbls. daily caused a temporary excitement in Logan County regions. There have been several wells completed in this county, and the original well was drilled by the Texas Pacific Coal & Oil Co. It made 60 bbls. at the time of completion, and is now making 20 bbls. on the pump. The producing sand is thought to offer best correlations with the Stalnaker sand of the Tonkawa Field. Logan County has been brought into more general interest by the finding of the Wilcox sand by the Roxana Petroleum Corp. in Section 30-19-4w at a depth of 5,985 feet.

The Oklahoma-Kansas crude market continues in good condition, although about 160,000 bbls. daily are being placed in storage by the crude purchasing concerns. The summer demand of crude has showed no let-up as far as the pipe line and purchasing companies are concerned. Seminole oil with its high quality is in good demand, and the producers are still storing a good portion of it against the time when better crude prices will be in order.

The status of operations in the Greater Seminole area on August 3 was:

	Seminole	Searight	Bowlegs	Earlsboro
Locations	1	1	19	14
Rigs	1	4	28	36
Drilling:				
Above 2,000	6	2	24	42
Above 3,000	14	11	21	47
Above 3,700	5	4	25	28
Below 3,700	37	9	90	81
Total	64	31	207	248

Grand total, 550.

Caddo County

English Drilling Co. made location for No. 2 Gafney, SW cor. NW SE Section 31-6-9w. Moran and others' No. 1 McKenna, SW cor. SE NE Section 5-5-9w, is rigging up.

Magnolia Petroleum Co.'s No. 3 Edwards, SW cor. NE NW Section 1-5-10w, was completed for 35 bbls. in sand at 2,039-51 feet. Gustaffson and others' No. 1-A Yale, CSL SW SW Section 1-5-9w, set the 8¼-inch pipe at 1,920 feet, drilled in to 2,410 feet and pumping 8 bbls.

Carter County

Magnolia Petroleum Co. has the rig up for No. 1 Choens, SE cor. NE SW Section 33-1s-3w. Schermerhorn Oil Co. and others have the rig up for No. 3 Lyles, SE cor. NW Section 11-2s-3w. Skelly Oil Co. has built the rig for No. 1 Morris, SE cor. SW NE Section 21-2s-3w. Magnolia Petroleum Co.'s No. 2 Morris, SW cor. NW Section 22-2s-3w, is drilling at 1,120 feet.

Magnolia Petroleum Co.'s No. 1 H. Peck, SE cor. NW SW Section 2-1s-3w, has been abandoned at 3,370 feet. No. 1 Denny, SE cor. NE NE Section 30-1s-3w, is making 265 bbls. from broken sands at 2,900 feet to 3,016 feet. No. 1 Hefner, NE cor. SW Section 33-1s-3w, was completed for 113 bbls. initial production from broken sand at 2,825-60 feet. Schermerhorn Oil Co. and others' No. 3 Calvery, NW cor. SE SW Section 2-2s-3w, came in for 100 bbls. from sand at 3,732-72 feet. Gypsy Oil Co.'s No. 6 Liles, SE cor. NE Section 3-2s-3w, is a 50-bbl. well in sands at 2,906-12 feet and broken sand at 2,912-56 feet. Magnolia Petroleum Co.'s No. 12 Adams, NW cor. NE NE Section 10-2s-3w, topped a broken sand at 2,385 feet, drilled to total depth of 3,788 feet and made 170 bbls. Atlantic Oil Producing Co.'s No. 4 Lyles, SW cor. NE SW, Section 11-2s-3w, was completed for 600 bbls. in broken sand at 2,880-3,395 feet, total depth 3,550 feet. Wirt Franklin's No. 1 Carpenter, NE cor. SW Section 11-2s-3w, is making 140 bbls. from broken sand at 3,785-3,821 feet. Schermerhorn Oil Co. and others' No. 1 Lylea, NW cor. SE NW Section 11-2s-3w, is pumping 165 bbls. from broken sands at 2,905-3,672 feet. Humble Oil & Refining Co.'s No. 6 Lester, SE cor. NW NW Section 35-2s-3w, is dry and abandoned at 2,455 feet.

Creek County

Transcontinental Oil Co.'s No. 2 Freeman, NE cor. SE SW Section 14-17-8, is being deepened, 8-inch casing now being set at 2,880 feet. G. T. Roach and others have the rig up for No. 2 Beavers, SW cor. NW SW NW Section 35-18-9. C. G. Tibbons' No. 1 Grayson, CEL NE NW Section 4-18-12, is spudding.

Riverside Oil Co.'s No. 2 Yarhola, NW cor. SW SE Section 8-18-7, drilled to 3,810 feet and plugged back to sand at 2,412-48 feet where it is pumping 10 bbls. after a 140-quart shot. Hemlock Oil Co.'s No. 1-A Thompson, SW cor. NW Section 35-18-10, was shot with 60 quarts in the Red Fork sand at 2,074-2,107 feet and made 30 bbls. Margay Oil Co.'s No. 1 Jones, SE cor. Section 2-17-10, is dry and abandoned at 2,890 feet in the Wilcox sand. Elson and others' No. 2 Wilcox, NW cor. Section 12-17-10, is a dry hole at 2,485 feet. Pontiac Oil Co.'s No. 5 Fulsom, CSL NW SW Section 13-17-10, Kellyville Pool, was completed for 600 bbls. from the Dutcher sand at 2,478-2,515 feet. Ted Ray Oil Co.'s No. 1 Smiles, SW cor. NE SW Section 13-17-10, is producing 360 bbls. from the Dutcher sand at 2,448-85 feet.

Ted Ray Oil Co.'s No. 4 Brink, NW cor. SE SW Section 13-17-10, is making 1,080 bbls. from the Dutcher sand at 2,448-80 feet. J. H. Wright's No. 21 Tahkaney, NW cor. NE NW Section 24-17-10, had an initial production of 150 bbls. from the Dutcher sand at 2,422-52 feet. Thompson & Black's No. 3 Wilson, NW cor. NE SW, Section 16-17-11, has been completed for 6,000,000 feet of gas from the Glen sand at 1,781-1,821 feet. C. O. Bukles' No. 3 Warnarkee, SE cor. NW Section 22-17-11, is dry and abandoned in the Wilcox sand at 2,525-39 feet. Love & Meyers and others' No. 3 Hendrickson, CSL SE NW Section 21-16-9, drilled the Dutcher sand at 3,025-39 feet and plugged back 1 foot and made 50 bbls. Sunray Oil Co. and Dixie Oil Co.'s No. 1 Hammer, NW cor. SE Section 11-14-10, is dry in the Wilcox sand at 3,175-90 feet. Quinlin & Henry's No. 3 Elrod, NE cor. SW Section 20-14-10, had the Dutcher sand at 2801-09 feet and is shut in for 2,000,000 feet of gas. Atlantic Oil Producing Co.'s No. 1 Scott, SE cor. NE NW Section 23-14-10, had 10,000,000 feet of gas in the Dutcher sand at 2,635-55 feet which became exhausted and the well deepened to 2,960 feet where it was abandoned after losing the hole.

Grady County

Carter Oil Co.'s No. 8 Walford, SW cor. SE SW Section 16-3-5w, Carter-Knox Pool, is drilling deeper at 1,826 feet. No. 1 C. Kerans, SW cor. NE SE Section 21-3-5w, cemented the 6-inch casing at 1,690 feet in preparation to deepen. No. 1 Hogue, NE cor. SW NE Section 21-3-5w, an old well, is going deeper, 6-inch pipe being cemented at 2,105 feet.

Nichols and others' No. 4 Dryden, NW cor. SW SE Section 35-5-8w, is making 65,000,000 feet of gas from sand at 2,151-2,420 feet. Amerada Petroleum Corp. and W. H. Gant's No. 2 Hicks, SW cor. NW SE Section 16-3-5w, Carter-Knox Pool, was completed for 30 bbls. from sands at 1,635-53, 1,685-95 and 1,721-27 feet. Clark & Cowden's No. 3-A Kerans, SE cor. SW NE Section 21-3-5w, is producing 40 bbls. from sand at 1,783-91 feet and 145 bbls. from sand at 1,811-18 feet.

Garvin County

Dixie Oil Co.'s No. 1 Perkins, SE cor. NW Section 15-4-1, is drilling at 1,570 feet. Magnolia Petroleum Co. has the rig up for No. 1 King, SE cor. NE SW Section 31-1-3w.

Pipe & Wilson's No. 2 Derdeyn, NW cor. NE SW Section 17-1-3w, is producing 50 bbls. from sand at 1,528-49 feet, total depth 1,731 feet. The Texas Company's No. 1 Banks, NW cor. NE SW Section 31-1-3w, is making 90 bbls. from sand at 3,493-98 feet.

Jefferson County

Danciger Oil Co.'s No. 1 Dilly, SE cor. NW Section 11-5s-7w, is dry at 2,513 feet.

Okfuskee County

Empire Gas & Fuel Co.'s No. 1 Grayson, NW cor. NE NW NE Section 30-11-10, an old well, is rigging up to deepen below 3,134 feet.

Gilcrease Oil Co. made location for No. 1 Hammer, SE cor. Section 17-10-9. Burke Greis' No. 2 Bruner, SW cor. Section 15-10-9, has been completed for 56,500,000 feet of gas in sand at 3,290-3,306 feet.

Hughes County

Indian Territory Illuminating Oil Co. made location for No. 1 Bruner, SW cor. SE Section 17-8-10. Mid-Continent Petroleum Corp.'s No. 1 Long, SW cor. Section 11-8-9, is dry and abandoned at 3,530 feet.

Pottawatomie County

Independent Oil & Gas Co. and others are rigging up rotary tools at No. 2 Brown, NW cor. SW NW Section 14-7-4, St. Louis Pool. C. J. Wrightsman has the rotary rig up for No. 1 Thompson, SE cor. NE NW Section 20-7-4, Pearson Pool.

Mid-Continent Petroleum Corp.'s No. 2 Doyle, SE cor. SW SW Section 19-7-4, Pearson Pool, has been put on the pump and is making 75 bbls. from the Hunton lime at 3,845-3,909 feet. No. 5 Doyle, NE cor. SW SW Section 19-7-4, has been completed for 150 bbls. in the Hunton lime at 3,763-3,896 feet, flowing through tubing and packer. Amerada Petroleum Corp.'s No. 5 Cowden, NE cor. SE SW Section 4-9-5, Earlsboro Pool, had the top of the Wilcox sand at 4,293 feet, drilled in to 4,326 feet and made 1,920 bbls. Independent Oil & Gas Co. and Darby Petroleum Co.'s No. 2 Knapp, NE cor. Section 8-9-5, had an initial production of 3,265 bbls. from the Wilcox sand at 4,361-69 feet. Barnsdall Oil Co.'s No. 3 Gibson, SE cor. SW NE Section 9-9-5, swabbed an initial of 878 bbls. from the Wilcox sand at 4,352-70 feet. No. 4 Gibson, NE cor. SW NE Section 9-9-5, had the Wilcox sand from 4,317-31 feet and made 3,400 bbls. No. 5 Gibson, SE cor. NW NE Section 9-9-5, made 1,790 bbls. from the Wilcox sand at 4,304-21 feet.

Seminole County

Barnsdall Oil Co. has the cellar dug for No. 7 Ingram, NW cor. SW Section 1-9-5, Earlsboro Pool. Location has been made for No. 3 Sango, SW cor. NW Section 1-9-15. The rig is on the ground for No. 2 Bruner, SE cor. SW Section 2-9-5. Sinclair Oil & Gas Co. made location for No. 1 Sango, SE cor. NE Section 2-9-5. The Texas Company is building the rig for No. 7 Anderson, SW cor. SE Section 2-9-5. Twin State Oil Co. is erecting the rig for No. 3 Hearn, NE cor. SE Section 2-9-5. Magnolia Petroleum Co. is putting up the rig for No. 2 Simpson, SE cor. NW SE Section 10-9-5, to deepen an old well. The Texas Company has the tools in to deepen No. 2 Wilmott, NE cor. SE Section 10-9-5. Magnolia Petroleum Co. has the rig on the ground for No. 7 Holmsley, SE cor. NE SE Section 11-9-5. The rig is under construction for No. 6 Seay, SW cor. NW SW Section 12-9-5. Amerada Petroleum Corp.'s No. 2 Strothers location was made SE cor. NW NE Section 3-9-6. Carter Oil Co. made location for No. 1 Dees, SE cor. SW NE Section 11-8-6, Bowlegs Pool. Location has also been made for No. 2 Dees, SW cor. NE Section 11-8-6.

Carter Oil Co. made location for No. 3 Jones, SW cor. SE SE Section 11-8-6, Bowlegs Pool. Mid-Continent Petroleum Co. made location for No. 5 Smith, NE cor. SE SW Section 12-8-6. Gypsy Oil Co. has dug the cellar for No. 1 Henderson, NW cor. NE NE Section 13-8-6. Indian Territory Illuminating Oil Co. has made location for No. 5 Billington, NE cor. SE NW Section 22-8-6. Location was made for No. 11 Bowlegs, NW cor. SW NE Section 22-8-6. Gypsy Oil Co. has dug the cellar for No. 1 Pattey, SW cor. NE NE Section 35-8-6. Carter Oil Co. has dug the cellar for No. 2 Fish, SE cor. NW SW Section 36-8-6. Gypsy Oil Co. has the cellar ready

The views of Senator Wm. E. Borah relating to Oil Conservation, as expressed in his speech at Denver, June 28, 1927:

"It is very generally recognized as a wise rule and that the interests of society are best served by leaving use and control of property to the initiative, judgment and discretion of the owner. But this can remain true only so long as that use is not in conflict with the fundamental rights and interests of the people or the nation. From the standpoint of the public, that which is economically unsound is morally wrong. *The public has an interest in these properties and under certain conditions or circumstances that interest may become controlling.*"

(Italics used are ours)

Universal Oil Products Company
Owner of the Dubbs Process
310 South Michigan Ave
Chicago, Illinois

for No. 2 Campbell, NW cor. SE Section 36-8-6. Indian Territory Illuminating Oil Co. made location for No. 2 Phoebe "A," SW cor. SE Section 36-8-6, Little River Pool. Location was also made for No. 2 Phoebe "B," SW cor. NE SW Section 36-8-6.

Mid-Continent Petroleum Corp. made location for No. 4 Wadsworth, NE cor. SW SW Section 36-8-6. Location for No. 6 Wadsworth was made NW cor. SE SW Section 36-8-6. No. 8 Wadsworth, SE cor. SW Section 36-8-6, is also a location. Shaffer Oil & Refining Co. is building the rig for No. 1 Marcome, SW cor. NE Section 36-8-6. Gypsy Oil Co. has dug the cellar for No. 1 Solomon, SE cor. NE Section 21-10-7. Independent Oil & Gas Co. has dug cellar for No. 2 E. Cobb, SE cor. SW NE Section 7-9-8. Mid-Kansas Oil Co. made location for No. 2 Babb, NE cor. SW SE Section 18-9-8. Indian Territory Illuminating Oil Co. is recting the rig for No. 2 Jackson, SW cor. NW Section 1-7-6, Little River Pool. The cellar has been dug for No. 1 McCulla, NE cor. SE NW Section 1-7-6.

The rig is being built for No. 2 Soketheche, NW cor. NE Section 1-7-6. The rigs are also being erected for No. 3 Soketheche, SW cor. NW NE, and for No. 4 Soketheche, SE cor. NW NE Section 1-7-6. The Texas Company has made location for No. 1 Coker, NW cor. SW Section 1-7-6. Tidal Oil Co. made location for No. 1 Jackson, SE cor. NE NW Section 1-7-6. Amerada Petroleum Corp. has the rig on the ground for No. 2 Nitey, SE cor. NE Section 2-7-6. Rigs are being built for No. 3 Nitey, NW cor. SE NE, and No. 4 Nitey, SW cor. SE NE Section 2-7-6. Barnsdall Oil Co. is moving the rig in for No. 2 Davis, NE cor. SE NW Section 2-7-6. Location has been made for No. 3 Davis, SW cor SE NW Section 2-7-6. Indian Territory Illuminating Oil Co. has moved the rigs out for No. 1 House, NE cor. SE; No. 2 House, NW cor. NE SE, and No. 3 House, SW cor. NE SE Section 2,7-6.

The rig is being built for No. 5 Nitey, SW cor. NE NE Section 2-7-6. No. 6 Nitey, NE cor. SW NE Section 2-7-6, is a rig on the ground. The rig is also on the ground for No. 7 Nitey, SE cor. SW NE Section 2-7-6. The rig is under construction for No. 8 Nitey, NE cor. NW NE Section 2-7-6. No. 9 Nitey, NW cor. NE Section 2-7-6, is a rig on the ground. The Prairie Oil & Gas Co. made location for No. 2 Templeton, NW cor. SW SE Section 12-8-6, Bowlegs Pool. Locations were made for No. 8 George Jones, NW cor. NW SE, and No. 7 George Jones, NE cor. NW SE, Section 11-8-6. The location has been made for No. 3 House, SE cor. NW SE Section 2-7-6.

Mid-Kansas Oil Co.'s No. 2 Presley, SE cor. NE Section 3-8-6, Bowlegs Pool, was completed as a dry hole at 4,404 feet. Indian Territory Illuminating Oil Co.'s No. 1 Lizzie, SW cor. NW Section 11-8-6, drilled the Wilcox sand from 4,250 feet to 4,260 feet and produced 888 bbls. Pure Oil Co.'s No. 2 Strothers "D," SE cor. NE NW Section 14-8-6, had water at 4,338 feet and was abandoned. Sinclair Oil & Gas Co.'s No. 4 Harjo, NW cor. SE SE Section 14-8-6, drilled to 4,650 feet and was abandoned. Indian Territory Illuminating Oil Co.'s No. 7 Goforth, SE cor. NE Section 15-8-6, made 102 bbls. from the Wilcox sand at 4,558-65 feet. No. 4 Livingston, NE cor. SE NW Section 15-8-6, found the Wilcox sand at 3,999 feet and drilled to 4,024 feet and produced 1,520 bbls. No. 9 Bowlegs, SW cor. NE Section 22-8-6, made 3,427 bbls. from the Wilcox sand at 4,294-4,310 feet.

The Prairie Oil & Gas Co.'s No. 5 Stidham, SE cor. SE NE Section 11-9-5, Earlsboro Pool, made 2,725 bbls. naturally from the Wilcox sand at 4,355-65 feet. No. 6 Stidham, SW cor. NE Section 11-9-5, was completed for 650 bbls. naturally from the Earlsboro sand at 3,489-3,519 feet. No. 1 O. Graham, NW cor. NW NW Section 10-9-5, came in for 3,590 bbls. from the Wilcox sand at 4,285-4,303 feet. No. 1 C. Davis, NE cor. NW NW Section 13-9-5, had the Wilcox sand from 4,343 feet to 4,351 feet and made 3,082 bbls. No. 1 Yahola, NW cor. W half SW Section 2-8-6, has been abandoned at 4,511 feet. No. 2 Yahola, SE cor. SW SW Section 2-8-6, has also been abandoned at 2,527 feet. No. 1 Templeton, SW cor. SE SE Section 12-8-6, produced 4,550 bbls. from the Wilcox sand at 4,170-4,202 feet.

Indian Territory Illuminating Oil Co.'s No. 1 Mills, SW cor. NE Section 31-9-7, has been abandoned at 4,465 feet. Mid-Kansas Oil Co.'s No. 1 Babb, NW cor. SE SE Section 18-9-8, has been shut in for 8,500,000 feet of gas from sand at 2,640-70 feet. Twin State Oil Co.'s No. 1 Hearn, SE cor. NE SE Section 2-9-5, Earlsboro Pool, flowed 420 bbls. from the Earlsboro sand and was deepened and completed for 3,793 bbls. in the Wilcox sand at 4,324-46 feet. Barnsdall Oil Co.'s No. 2 D. Davis, SE cor. NW SE Section 11-9-5, had an initial production of 3,363 bbls. from the Wilcox sand at 4,362-80 feet. No. 2 M. Davis, NE cor. SW Section 11-9-5, made 160 bbls. on the swab, producing from the Wilcox sand at 4,322-4,504 feet. Gypsy Oil Co.'s No. 3 B. Carter, SE cor. NW Section 11-9-5, was completed for 42 bbls. in the Earlsboro sand at 3,451-57 feet and plugged back to 3,537 feet.

Phillips Petroleum Co.'s No. 1 Dunaway, NW cor. Section 14-9-5, had a hole full of water in the Wilcox sand at 4,475 feet and was plugged back to the Misner sand at 4,160 feet and completed for 42 bbls. No. 2 Dunaway, NE cor. NW NW Section 14-9-5, has been abandoned after rigging up the rotary. Gypsy Oil Co.'s No. 1 D. Smith, NW cor. NE Section 15-9-5, topped the Wilcox sand at 4,302 feet, drilled to 4,311 feet and has been abandoned with a hole full of water. Pure Oil Co.'s No. 1 Aldridge, NW cor. SE NW Section 3-9-6, Searight Pool, was deepened to the Wilcox sand 4,308-72 feet and made 2,098 bbls. Gypsy Oil Co.'s No. 2 Cudjo, NW cor. SW NE Section 4-9-6, had an initial production at 1,102 bbls. from the Wilcox sand at 4,351-69 feet.

Magnolia Petroleum Co.'s No. 4 Holmsley, SE cor. Section 11-9-5, had an initial production of 3,393 bbls. from the Wilcox sand at 4,234-45 feet. No. 5 Holmsley, NE cor. SE Section 11-9-5, had Wilcox sand at 4,293-4,309 feet and made 2,360 bbls. Barnsdall Oil Co.'s No. 2 Wasutke, NW cor. NE SW Section 12-9-5, was shot with 30 quarts in the Wilcox sand at 4,240-61 feet and made 2,547 bbls. Carter Oil Co.'s No. 2 Paine, SW cor. SE Section 12-9-5, is dry and abandoned at 4,567 feet with a hole full of water in the Wilcox sand. Roxana Petroleum Corp.'s No. 1 Spencer, SW cor. NW Section 12-9-5, topped the Wilcox sand at 4,302 feet, drilled in to 4,316 feet and made 3,039 bbls. Twin State Oil Co.'s No. 1 Barker, SW cor. NW NE Section 12-9-5, was completed for 5,082 bbls. in the Wilcox sand at 4,245-63 feet.

Carter Oil Co.'s No. 4 M. Killing, NE cor. NW Section 23-9-6, Seminole Pool, is making 370 bbls. from the Wilcox sand at 4,025-58 feet. Magnolia Petroleum Co.'s No. 3 Franks, SE cor. SW SW Section 25-9-6, made 300 bbls. from the Wilcox sand at 4,231-60 feet. Carter Oil Co.'s No. 2 Gilliland, SE cor. NW NE Section 27-9-6, made a 20-bbl. pumper from the Wilcox sand at 4,268-80 feet. No. 8 Lukes, NW cor. SE NE Section 27-9-6, topped the Wilcox sand at 4,084 feet and at 4,100 feet made 355 bbls. on air. Phillips Petroleum Co.'s No. 6 Strothers, NW cor. SW SE Section 27-9-6, has been abandoned at 3,317 feet. Carter Oil Co.'s No. 2 Creamer, NW cor. SW SE Section 34-9-6, is dry and abandoned at 4,468 feet in the Wilcox sand. Gypsy Oil Co.'s No. 5 T. Cudjo, SW cor. NW SE Section 34-9-6, pumped 85 bbls. from the Wilcox sand at 4,327-4,344 feet. Pure Oil Co.'s No. 5 Strothers "B," SW cor. NW Section 36-9-6, had an initial production of 1,985 bbls. from the Wilcox sand at 4,070-4,096 feet. The Texas Company's No. 1 Strothers, NW cor. SW NW Section 2-8-6, is a dry hole at 4,416 feet.

Okmulgee County

Kirkland & Son has a machine at the location for No. 1 Brooks, NE cor. SE NE SW Section 17-15-13. Church and others' No. 1-A Rentie, NE cor. SE Section 18-14-15, is rigging up. F. Smith's No. 1-A Summers, SE cor. NE Section 17-11-12, is spudding.

T. E. Wheeler and others' No. 1 Raymond, SW cor. NW Section 1-15-12, is dry and abandoned at 2,650 feet in the Wilcox sand with a hole full of water. A. G. Hazlett's No. 2 Field, NW cor. NE Section 33-13-13, was completed for 2,330,000 feet of gas from sand at 1,376-1,419 feet. Midland Oil Co.'s No. 1 Silpee, NW cor. Section 20-12-13, is making 5,500,000 feet of gas from sand at 1,855-65 feet.

Muskogee County

H. E. Williams is moving in a machine for No. 1 Ponds, NE cor. NW SE Section 20-15-17. Gypsy Oil Co.'s No. 21 Sanders, CNL SW SW Section 34-15-18, near Muskogee, has been completed for 5,200,000 feet of gas in sand at 1,788-1,823 feet.

Osage County

Oklahoma Natural Gas Corp.'s No. 772, NE cor. SE SE Section 33-22-11, is drilling at 300 feet. Devonian Oil Co. has the machine on the ground for No. 1. NE cor. Section 33-21-10. Kewanee Oil & Gas Co. made location for No. 3, SE cor. NE SE SE Section 6-21-12.

Pawnee County

Westerly Oil Co.'s No. 3 Smith, NE cor. SW SW, Section 22-20-6, is dry and abandoned at 3,600 feet. Black and others' No. 3 Cotton, C SE NE Section 6-20-8, is making 1,500,000 feet of gas from sand at 1,145-50 feet.

Pittsburg County

Quinton Spelter Co. has the rig on the ground for No. 1 Featherstone, C SW NE Section 22-7-17.

Pontotoc County

American Oil & Refining Co. is building the rig for No. 1 Daniels, CSL N half N half SE Section 27-5-6. No. 1 Moller, NE cor. SE SW Section 27-5-6, is drilling at 1,410 feet. Shaffer Oil & Refining Co. is putting up the rig for No. 1 Gilcrease, NW cor. NE Section 36-5-7. No. 2 Yoakum, SW cor. NW Section 16-5-8, is drilling at 150 feet.

T. B. Slick and others' No. 1 Graham, SW cor. SE Section 31-5-6, has been completed for 500 bbls. pinched in. The oil is coming from the Hunton lime at 2,690-93 feet. Louisiana Oil Refining Corp.'s No. 2 Harjo, SE cor. SW SE Section 17-5-8, is making 398 bbls. from sand at 2,440-56 feet. W. R. Ramsey's No. 1 Warfle, NW cor. NE NE Section 20-5-8, made 190 bbls. the first gauge, producing from sand at 2,420-24 feet. Shaw and others' No. 1 Bennett, NE cor SW Section 33-5-5, has been abandoned at 2,920 feet. Dixie Oil Co.'s No. 1 La Salle, SE cor. NW Section 10-4-6, had a show of oil in the Wilcox sand at 3,000-01 feet, drilled to 3,235 feet and was abandoned.

Stephens County

Medlin and others' No. 1 Simpson, NE cor. SW SE Section 34-1s-8w, is drilling at 500 feet. Winkler & McQueen made location for No. 1 Gray, C SW NE Section 29-1s-6w. Wirt Franklin's No. 6 Apple-Franklin, SW cor. NE NE Section 24-1s-4w, is drilling at 1,725 feet. Davidson and others' No. 1 fee, SE cor. NW NE Section 5-2s-4w, is drilling at 390 feet.

Huff & Duff's No. 1-A fee, SW cor. NE Section 34-1s-8w, is pumping 40 bbls. from sand at 1,664-75 feet. Medlin and others' No. 3 Burke, NE cor. NW SE Section 34-1s-8w, is pumping 40 bbls. a day from sand at 1,661-74 feet. Hall & Briscoe's No. 1 School Lot, SW cor. SE SE SE Section 24-1s-4w, came in for 1,300 bbls. from sands at 2,459-2,708 feet. Wirt Franklin's No. 2 Apple-Franklin, NW cor. NE SE Section 24-1s-4w, is dry and abandoned at 4,109 feet. Humble Oil & Refining Co.'s No. 1 Peddycord, NE cor. Section 25-1s-4w, was completed for 147 bbls. from a series of sands at 2,789-3,284 feet.

Tulsa County

Sheridan & Turner's No. 1 Unallotted, NW cor. SW Section 10-16-12, is spudding. Sunray Oil Co.'s No. 1-A Baysinger, NW cor. NE SE Section 14-17-13, is a dry hole at 2,235 feet in the Turkey Mountain sand.

NO EXCEPTIONAL DEVELOPMENTS MARKED THE WEEK IN KANSAS

There were no exceptional developments in the fields of Kansas last week, and the news was confined to routine completions.

Butler County

Crosby and others' No. 1 De Mour, SE cor. NW Section 7-26-7, is dry and abandoned at 3,151 feet. Empire Gas & Fuel Co.'s No. 1 Reitz, NW cor. SE Section 34-27-5, made an 80-bbl. well after a shot of 80 quarts in sand at 2,689-2,708 feet. Allison & Fitzwilliams' No. 3 McGinnis, NW cor. SE Section 9-27-6, is dry and abandoned at 3,165 feet.

Chase County

Loriaux and others' No. 1 Daub, NW cor. Lot 18, Section 19-19-8, is drilling at 1,360 feet. Gypsy Oil Co. and Basom's No. 1 Leidy location was made NW cor. SW NE Section 36-22-9.

Amerada Petroleum Corp.'s No. 1 Lipps, C SE NW Section 36-18-6, has been completed for 2,000,000 feet of gas in sand at 1,196-1,207 feet.

Coffey County

Arkansas Fuel Oil Co. made location for No. 1 Burk, NW cor. SW Section 23-22-13. Kinsey and others' No. 1 Bodley, SW cor. NW NW SW Section 10-22-15, has been abandoned at 400 feet.

Cowley County

Forrester and others made location for No. 3 Countryman, C SE NW Section 4-33-7. Dickey and others' No. 1 Eaton, SW cor. SE Section 3-35-4, is a dry hole at 3,815 feet.

McPherson County

McPherson Oil & Gas Co. made location for No. 1 Anderson, C SE NE Section 31-18-2w.

Elk County

Arkansas Fuel Oil Co.'s No. 2 Taylor, C SW SW Section 17-29-10, is rigging. Boudell Oil Co. and others' No. 2 Rettig, SE cor. Section 29-31-10, is drilling at 460 feet. Theta Oil Co. has the rig up for No. 2 Lisco, NE cor. Section 34-31-10. Griffin, Bell and others' No. 1 Cunningham, NW cor. Section 35-31-10, is a rig on the ground.

Empire Gas & Fuel Co.'s No. 6 Porter, NE cor. NW Section 13-29-8, is a 50-bbl. well in sand at 2,005-21 feet.

Greenwood County

Polhamus and others have the rig up for No. 1 Teter, NE cor. SW Section 26-24-9. Rogers & Ballard's No. 1 Wiggins, SW cor. Section 35-25-10, is a rig building. Rogers and others' No. 1 Clopton, NE cor. NW NW Section 2-26-10, is rigging up.

Roxana Petroleum Corp.'s No. 2 Sheets, NW cor. NE Section 23-22-11, is making 175 bbls. from sand at 1,857-98 feet.

Marion County

Parris and others are building the rig for No. 1 Lehrman, C N half SE Section 1-21-1.

Morris County

Nicols and others' No. 1 Wilde, SE cor. Section 15-17-7, is making 250,000 feet of gas from sand at 570-80 feet.

Rawlins County

Byson Oil Co.'s No. 1 Gordon, SE cor. Section 5-3-34w, is dry and abandoned at 3,076 feet.

Reno County

Hartman & Skaer's No. 1 Dunn, NE cor. SW SE Section 28-23-8w, has been abandoned at 4,125 feet.

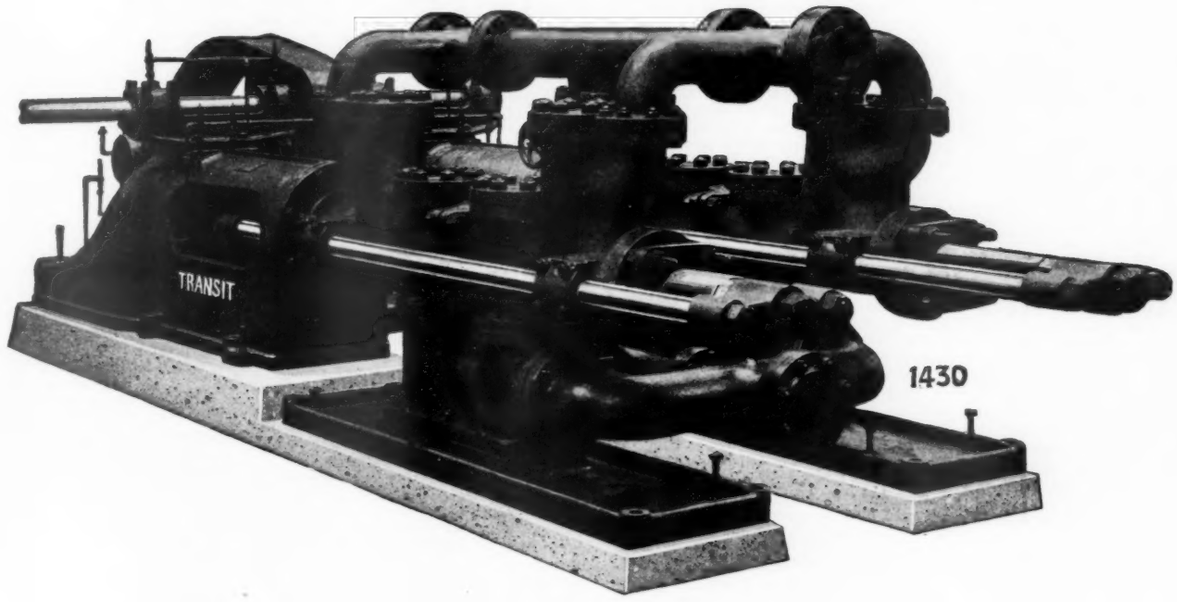
Sumner County

Flitch and others' No. 1 Oxford Townsite, Lot 16, Block 17, Section 11-32-2, is drilling at 400 feet. Champlin Oil & Refining Co.'s No. 1 Latta, SE cor. SW NW Section 9-30-2w, made 65 bbls. after a shot of 50 quarts in sand at 3,042-56 feet. Roxana Petroleum Corp.'s No. 3 Sleigh, NE cor. NW NW Section 25-31-2, had sand at 1,864-1,917 feet from which it made 500 bbls. after a shot of 60 quarts.

Woodson County

Reesor & Lenord's No. 1 Morgan, SW cor. NE NE Section 13-25-15 ,is drilling at 515 feet.

TRANSIT
Pipe Line Pumps



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Trinity Horizon Well Flows 4,000 Bbls.

Pine Island Well of The Texas Company After Being Deepened Creates Sensation. Bossier Parish Deep Test Spraying Oil

By Neil Williams
Staff Correspondent, Louisiana-Arkansas

SHREVEPORT, La., Aug. 8.—The Pine Island Trinity horizon created another sensation when The Texas Company's No. 5 Herndon, Section 14-21-15, Caddo Parish, started flowing oil Sunday and Monday was producing at the rate of 4,000 bbls. daily of 42 gravity oil. This well was bailed in Friday, making only 15,000,000 feet of dry gas after being deepened 85 feet from a depth of 3,592 feet, where it had been producing 200 bbls. of oil and 20,000,000 feet of gas. It was being permitted to blow when the oil showed up. Next to Haynes Brothers' No. 1 Murray, a quarter mile southeast, which revived interest in deeper drilling in that district by being brought in early in July with an initial flow of 12,000 bbls. daily, and producing 6,500 bbls. the first 24 hours, the Herndon well is the biggest yet completed in the Trinity horizon there. The Haynes well, however, has dropped in production to around 1,700 bbls. daily at this time. There are 10 Trinity wells in the field producing around 9,500 bbls. of oil and in addition another test with favorable prospects was to be bailed in Monday afternoon. The latter is Dixie Oil Co.'s No. B-5 Files and Mabry in Section 14.

Other wells continue to fluctuate, the Gulf Refining Co.'s No. 13 Tyson climbing from around 800 bbls. daily to a record of 1,800 bbls. during the week and then dropping back until its present production is around 1,400 bbls. daily.

Oil in Bossier Deep Test

With a Bossier Parish, Louisiana, deep test spraying oil, new interest was taken in possibilities of additional production at lower levels in the North Louisiana-Arkansas division the past week. This marks the first oil production from the Trinity horizon in northwest Louisiana outside the Pine Island Field and the first deep production, either oil or gas, in Bossier Parish.

This test, drilled by the Sligo Syndicate on the Jeter land in the NE cor. NE Section 23-17-12, has been the center of attention in the division the past week. Bailed in three weeks ago at a total depth of 4,154 feet, the test started flowing gas gauging 1,728,000 feet daily. This gas was killed and the hole deepened to 4,209 feet, which failed to better the production. The test then was drilled to 4,272 feet and when bailed again the past week came in making an estimated 2,000,000 feet of gas and from 25 to 30 bbls. of oil daily.

At that time there was about 60 feet of shale caving and mud on the bottom, and, as the oil was thought to have been seeping up through this from the bottom, the flow was killed, the hole was reamed to the bottom, cleaned out, the liner set and the test bailed again in an effort to increased the production. However, on bailing late Saturday the well came in again showing virtually the same production.

The well has nearly 300 feet of open hole with 1 foot of porous lime on the bottom, 4 feet of hard sand and 6 feet of soft sand. Gas production at the 4,154-foot level was from 4 feet of sandy lime, and from then on drilling was mostly in this formation.

While the production is small, the oil is of high quality, greenish red in color and testing 41.6 gravity. Gas from the well tests 211 gallons of gasoline per 1,000,000 feet. But operators are particularly interested in the proof that oil exists at deeper levels in Bossier Parish.

The well is in the Sligo district of Bossier Parish near the apex of the old Elm Grove structure, which has produced gas at shallower levels for several years. It is on a block of 4,500 acres, and acreage around it has been selling from $5 to $50 an acre at distances ranging from a half mile to three miles.

Two other deep tests are drilling in Bossier Parish, one in the Bellevue Field and the other in the Elm Grove district. Neither has encountered showings. The former, Humble Oil & Refining Co.'s No. 30 Bliss & Wetherbee, Section 15-19-11, is at a total depth of 3,488 feet in hard white sand, while the latter, Palmer Corp.'s No. 4 Bossier, Section 9-16-11, is drilling below 4,900 feet.

Pleasant Hill District

Seip and associates' No. 1 Roberson, Section 18-10-12, southern DeSoto Parish, extending production of the Pleasant Hill district a mile northwest, was completed the past week flowing 25 bbls. daily through 2-inch tubing. This is 3 miles northwest of the center of production in Sabine Parish. In the main field, a late development was the completion of Arkansas Fuel Oil Co.'s No. 8 Logan, Section 33-10-12, flowing 6,100,000 feet of gas from a depth of 3,285 feet, where it blew out several weeks ago. After the blow out the gas was killed and the hole deepened to 3,352 feet.

Richland Parish developments were featured during the week by the addition of the best gas well yet completed in the Rayville district. This was Gulf Refining Co.'s No. 2 Rhymes, Section 5-16-6e, which was bailed in at a depth of 2,420 feet gauging 44,042,000 feet of gas daily. This test had been drilled to a total depth of 2,880 feet, but plugged back to the gas sand.

Carterville Gas Field

Of importance to the Carterville gas field the past week was the completion by the Magnolia Gas Co. of its 12-inch line from the field to its Sarepta-Waskom-Beaumont trunk line, the 12-mile Carterville feeder connecting at Sarepta. The line at present is handling approximately 12,000,000 feet of Carterville gas daily, the first time any of this gas has gone outside the field. As industrial gas is in demand, the completion of this line, the field's first outlet, is expected to stimulate further drilling in the Carterville district.

Production Declines

Indicating a little more activity in the division, 32 wells were completed or abandoned the past week as compared to only 13 the previous week. Of the 32 completions, 13 were oil producers adding 1,768 bbls. of new production, 7 were gassers and the remainder abandonments. The bulk of the new production was in Arkansas, the Smackover Field and the Irma district of Nevada County getting 7 good wells. In Louisiana among the new wells was one in Grant Parish and three small ones in La Salle Parish.

However, despite this new production and an increase in the Caddo Field, the steady decline in oil output for the division as a whole continued during the week with a decrease of 1,485 bbls. in the daily average. Production of the Smackover Field has dropped to 94,275 bbls. daily, of which 84,000 bbls. is heavy oil. Production by fields during the week was:

North Louisiana	
Caddo light	17,820
Caddo heavy	5,185
Homer	4,920
Haynesville	7,450
DeSoto-Red River	3,950
Elm Grove	645
Bellevue	1,400
Cotton Valley	5,450
Urania	9,630
Pleasant Hill	1,020
Total	57,470
Arkansas	
El Dorado	5,780
Lisbon	3,540
Smackover light	10,275
Smackover heavy	84,000
Stephens	1,330
Nevada	1,600
Bradley	100
Total	106,625
Total both states	164,095
Total last week	165,580
Difference	1,485

A total of 186 tests were drilling in North Louisiana and Arkansas during the week; 7 were waiting on pumping rigs; 18 rigs were up; 27 derricks completed, and 16 locations staked.

NORTH LOUISIANA

Bossier Parish

Humble Oil & Refining Co.'s No. 30 Bliss & Wetherbee, Section 15-19-11, Bellevue deep test, is drilling shale at 5,415 feet. The Palmer Corp.'s No. 4 Bossier, Section 9-16-11, Elm Grove deep test, is in a hard sand at 4,917 feet.

Caddo Parish

The Pine Island Field of Caddo Parish continued the most active of any district in the entire division. The deep sand recorded one completion, The Texas Company's No. 13-B Noel, Section 14-21-15, which was bailed in flowing 390 bbls. of oil, 1,300 bbls. of salt water and 10,000,000 feet of gas from a total depth of 3,803 feet. In the same section, his company's No. 5 Herndon is having 6¼-inch casing set with a packer at 3,600 feet. This is an old well deepened. No. 6 on this lease is drilling at 2,338 feet, and in No. 8, the 10-inch casing has been cemented at 2,375 feet. On the Herold lease in this section, The Texas Company's No. 9 test is drilling hard sand at 157 feet. Also in this section, Benedum-Trees Oil Co. has taken over the active operation of the Arkansas Fuel Oil Co. on the Huckaby lease and has cemented 10-inch casing in the No. 1 test being drilled there.

Benedum-Trees Oil Co. also has taken over two wells of the Arkansas Fuel Oil Co. to the south in Section 23, these being Nos. 1 and 2 on the Bashara land. The former is drilling lime at 3,535 feet while at the latter a rig has been completed. Another Benedum & Trees interest, the Pittsburgh Oil & Development Co., has started two deep tests in Section 15, one on the Herndon lease and the other on the Huckaby land. The former test is down 2,200 feet with 12½-inch casing set at 212 feet and the latter at 1,500 feet with the casing at 194 feet. The Arkansas Natural Gas Co., another subsidiary, is drilling a deep test, No. 2 Lane, Section 13, and is down 3,495 feet in lime.

Dixie Oil Co. has a rig up for No. 9 Caddo Mineral Land Co., Section 23. In the same section is Magnolia Petroleum Co.'s No. 21 Robertshaw which has 10¼-inch casing cemented at 2,385 feet. The Texas Company also is to drill a deep test in this section, No. 49 Caddo Minerals Land Co., and a rig already is up. The latter company's No. 10 Mabry, Section 15, has spudded in and is drilling shale at 153 feet. No. 19 Raines in this section is drilling at 204 feet.

Dixie Oil Co.'s No. 89 Dillon, Section 14, is drilling at 1,900 feet. This company's No. 5-B Files & Mabry, same section, is coring lime at 3,738 feet. No. 6-B on this lease has just been spudded

(Continued on Page 120)

DISAPPOINTMENT IN TWO WILDCATS IN NORTH LOUISIANA-ARKANSAS

By Neil Williams

SHREVEPORT, La., Aug. 8.—Wildcat possibilities in the Arkansas-North Louisiana division again met with disappointment the past week when two more tests with favorable prospects in unproven territory, one in Arkansas and one in North Louisiana, apparently turned out failures.

Lochnager Oil & Gas Co.'s No. 1 Beasley, Section 26-9-6e, a rank wildcat in Catahoula Parish, Louisiana, which blew out last February, making an estimated 20,000,000 feet of gas daily, and stimulating hopes for the opening of a new gas field, flowed salt water when bailed in late the past week.

This test is at a total depth of 3,093 feet, at which level the blowout occurred. Following the blowout last February, the gas was killed and 4½-inch casing cemented at 2,686 feet, but since then the test has been shut down because of the floods. At present the hole is being reamed out from 2,700 to 3,093 feet, and the test will be bailed again.

In Union County, Arkansas, there is considerable disappointment in Ohio Oil Co.'s No. 1 Pumphrey, Section 1-17-14, not picking up the oil sand encountered by this company's No. 1 Crain, three-eighths of a mile south, in the same section. The Crain well, from 5 to 6 miles northeast of the El Dorado east field, has been pumping from 47 to 50 bbls. of 33 gravity oil since the latter part of June, when it was completed. It is producing from a total depth of 3,014 feet, but the Pumphrey test Saturday was coring at 3,126 feet without having picked up the same producing sand. It is expected the hole will be deepened from 50 to 75 feet more and abandoned if production is not found.

The district was the center of an interesting lease play, principally by El Dorado, Ark., operators and lease men, but the depth at which the oil sand was found has checked any extensive drilling activity pending the completion of the Pumphrey test.

Phillips Petroleum Co.'s No. 1 Marion, Section 32-20-9e, West Carroll Parish, northeastern Louisiana, caused a little stir when it was reported as having a gas blowout at a depth of 1,710 feet. The test encountered only a fresh water flow with a small showing of gas which was mudded off and drilling resumed.

A semiwildcat in Grant Parish, Louisiana, pumping 200 bbls. of oil and 200 bbls. of salt, and two small wildcat pumpers in La Salle Parish were among completions of the division the past week. Among the abandonments was W. D. Wingfield's No. 1 Hadley, Section 2-18-13, the furtherest northeast test ever drilled in the Lawson-Urbana district of Union County, Arkansas.

Miller County, Arkansas, is to get a new test and a location has just been staked by H. A. Guess and associates on the Caplan farm, C Section 30-15-26. These operators have a 1,500-foot block and will drill a 3,000-foot test.

Natural Gas & Fuel Corp. of El Dorado, Ark., is getting ready to drill its first test in Richland Parish, Louisiana. A derrick is being built for No. 1 Sartor, Section 20-15-5e. This company the past week leased 75 miles of the old Crusader pipe line extending from El Dorado to Richland Parish. This company, it is understood, is attempting to build up new gas reserves to replace the rapidly declining production in the Smackover Field, which it draws on to supply El

(Continued on Page 122)

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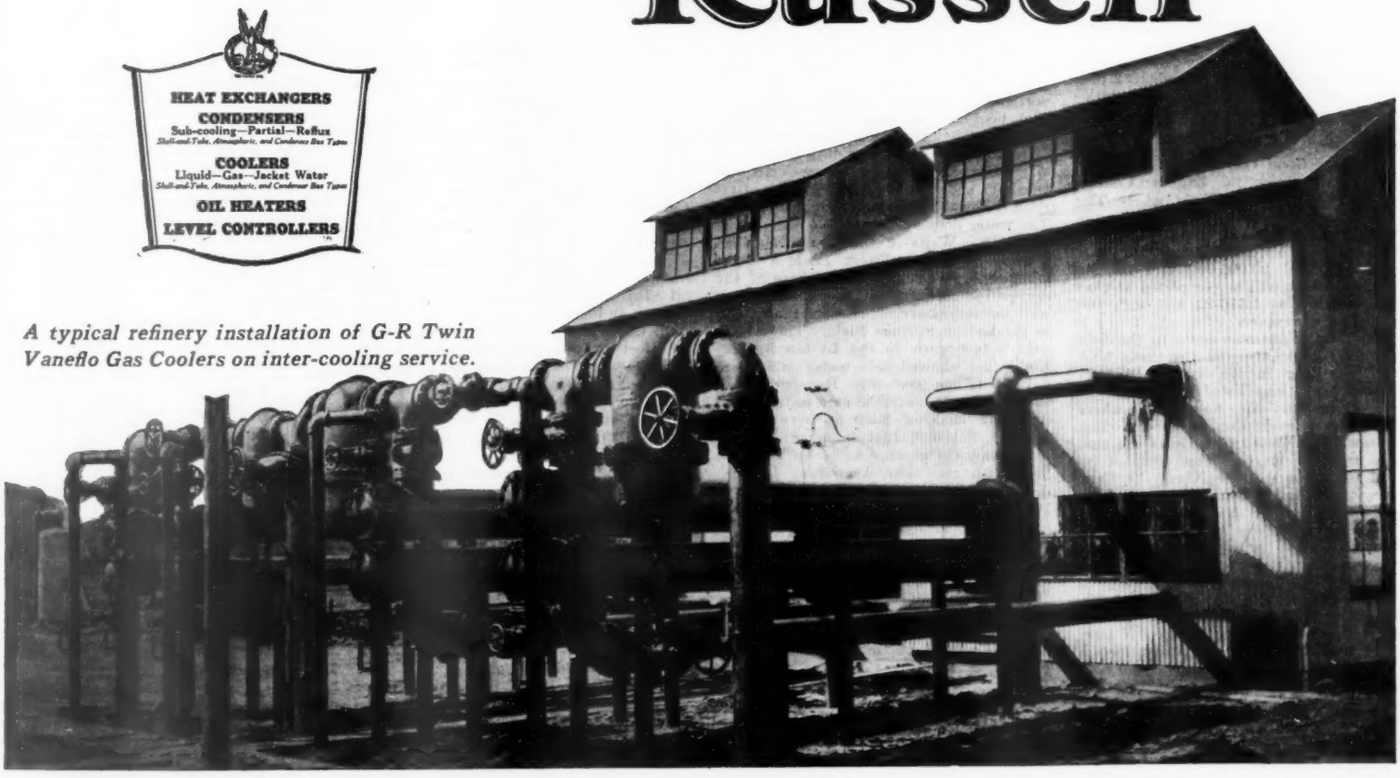

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Alworth Pool Is More Encouraging

Test in That Section of Jim Hogg County, Texas, Making 20,000,000 Feet of Gas and Spraying Some Oil

By B. D. Stevenson
Staff Correspondent, Southwest Texas Fields

SAN ANTONIO, Tex., Aug. 8.—Hope that the Alworth Pool in Jim Hogg County, 5 miles south of the Randado Pool, which for months has been struggling for an existence, would merge into a real pool, began to take on more assurance last week when Alworth-Stevens-Hild Oil Corp. tested their No. 13 Garza, Block 6, Section 39, of Jim Hogg County and it made an estimated 20,000,000 feet of gas and some oil. The well was in but a short time when the casing seat gave way and it was at once mudded in and the casing set and cemented again and the well is again about ready to bring in. Casing was set at 1,007 feet and the hole drilled to 1,010 feet. Some of the first wells drilled made considerable oil and some water and the Magnolia Petroleum Co., drilling on the north edge, got some wells but nothing completed thus far has been quite as good as the operators in the field believe is there.

The Laredo district came in for more completions the past week than it has had in any one week for some time. None of the completions added anything to the picture except production. No new sands nor extension of fields. In the Carolina-Texas Field, Breen & Woodward completed No. 1 Webster in Survey 684 at 3,050 feet making 65,000,000 feet of gas and Hayes-Barnsley in Block 22, Survey 335, in the same field, tested 20,000,000 feet of gas at 2,152 feet and will set casing and complete the well this week. In the Schott Field, Magnolia Petroleum Co. completed No. 8 Garcia, Survey 58, at 1,561-67 feet good for about 30 bbls. of oil. It was the only oil well. In the new Albercas Pool, 4 miles east of the Aviator Pool, and the same north of the Henne, Winch & Farriss Pool, the Newton Drilling Co. completed its No. 1 Bruni in Block 65 at 2,155 feet testing 40,600,000 feet of gas with 605 pounds rock pressure. O. W. Killam tested 3,000,000 feet of gas in his No. 5 Bruni in the same field, north of the Newton well but in the same block and has abandoned the test at 2,176 feet. It is supposed to mark the edge of the field in that direction. The Newton well showed some oil. It had sand at 2,160-80 feet and the top tested gas and the bottom tested some oil. Casing was set at 2,155 feet and the well is completed as a gasser.

Good Gas Well

In the territory in Zapata County south of the Jennings Field where The Texas Company has been getting encouragement to continue drilling with every well drilled. No. 7 Jennings of that company tested 20,000,000 feet of gas and presumably will be completed at that depth, in sand at 1,416-22 feet with 400 pounds rock pressure.

None of the abandonments in the field had any significance and the great bulk of the drilling in the Laredo district with 52 operations listed are in proven fields or around the new spots where more or less production has been found.

Elsewhere in southwest Texas the past week proven fields presented little of interest other than in the Kingsville Feld. There the Humble completed a 40,000,000-foot gas well in No. 1 Kivlin in the northwest corner of Lot No. 4, Section 39 at 2,240 feet with 950 pounds rock pressure. The well was drilled to 3,900 feet and plugged back. At 2,596 feet it began making heads at the rate of 200 bbls. daily but soon went dead. At 2,640 feet it shot oil over the derrick but later tested salt water and at 3,070 feet it made about 50 bbls. of oil and 1,000 bbls. of sulphur water. The gas sand at 2,240 feet is producing in other wells. In the same field, Humble's No. 4 Kleberg is about to be completed at 2,440 feet.

Jim Hogg County

Alworth Brothers' No. 13 M. Garza, Survey 39, Block 6, at 1,015 feet gauged 20,000,000 feet and is spraying oil.

Webb County

Magnolia Petroleum Co.'s No. 8 Garcia in Survey 58 of the Schott Field at 1,561-67 feet made 30 bbls. of oil.

Newton Drilling Co.'s No. 1 Bruni, Albercas grant, Block 65, at 2,150-80 feet gauged 40,600,000 feet of gas.

Woodward, Breen and others' No. 1 Webster, Survey 684, Carolina-Texas Field, at 3,004-10 feet came in making 75,000,000 feet with rock pressure of 1,000 pounds.

O. W. Killam's No. 5 Bruni, Albercas grant, Block 65, has been abandoned at 2,175 feet after testing 3,000,000 feet of gas.

Tubbs & Wright have abandoned No. 1 Reiser in Survey 1,617, Block 14.

Zapata County

J. H. Winch's No. 2 Bustamante, Block 2, Share 11, has been abandoned at 2,056 feet.

Duval County

Humble Oil & Refining Co.'s No. 6 Walsh in Survey 185 of the Piedras Pintas salt dome at 3,639 feet has been abandoned.

K. & S. Corp.'s No. 57 Holbien in Survey 17, Block 40, of the Henne, Winch & Fariss Field, has been junked at 3,550 feet with tools lost in the hole.

New Locations

T. P. Morgan's No. 2 de la Garza is location in Survey 335, Block 23, is location in the Carolina-Texas Field in Webb County.

Magnolia Petroleum Co. has made location for the No. 1 R. Benavides in Survey 2,234 of the Cole Field in Duval County.

Cole Petroleum Co. has moved tools back over the No. 36 Benavides, discovery well of the Cole gas field, No. 2 in Webb County, and has resumed drilling.

Caldwell County

Magnolia Petroleum Co.'s No. 10 Tiller in the John Henry Survey in the Luling Field, was completed at 2,156 feet making 30 bbls. and No. 16 Stair in the same field was completed at 2,088 feet making 35 bbls.

Bexar County

Witherspoon Oil Co.'s No. 1 W. D. Kerr in the Somerset Field at 1,440 feet is pumping 4 bbls. of 36 gravity oil.

Kleberg County

Humble Oil & Refining Co.'s No. 1 Kivlin, Lot 4, Section 39, total depth 3,900 feet, shot at 2,248 feet and is making around 40,000,000 feet of dry gas.

New Locations

Western Gas & Fuel Co. has made location in the Adams gas field in Medina for No. 2 Nixon and spudded test in.

Magnolia Petroleum Co. has made location for the No. 1 Laura Rios in the Luling Field in Caldwell County.

Humble Oil & Refining Co. is moving in machinery in Kleberg County for No. 2 Sexauer in Survey 41, Block 11.

Associated Petroleum Co.'s No. 4 J. Kohler is location in Survey 39 in the Somerset Field.

L. P. Unkel has made location for No. 1 Hampton in the C. H. Jaeger Survey in Gonzales County.

Houston Oil Co.'s No. 4 R. L. Pettus is location in the P. Trevino Survey in Goliad County.

C. W. Simpson has derrick up and is moving in machinery for test 12 miles southeast of Yorktown in Goliad County.

George E. Smith is moving in machinery and has derrick up for the No. 1 Harwood in San Patricio County.

D. W. Mauer and H. A. Ellis' No. 1 Henke is location in Karnes County, with derrick up and machinery moving in.

Cole Gas Field—Duval

Cole Petroleum Co.'s No. 38 Benavides, Survey 10, Block 12, located 155 feet to northeast and northwest lines. Maddox and others' No. 1 Bruni, Block 15, Survey 1, at 64 feet to southwest and 53 feet to southeast lines, is drilling at 1,600 feet. Houston Oil-Roxana's No. 1 Bruni, Survey 11, Block 23, located 100 feet to southeast and 110 feet to northeast lines, is drilling at 2,229 feet. Newton Drilling Co.'s No. 1 Bruni, Survey 9, is location 500 feet to northwest lines and 150 feet to northeast lines. Trussell, Cezeaux & Putman's No. 1 Bruni is location in Survey 10.

Piedras Pintas Salt Dome

Humble Oil & Refining Co.'s No. 6 Walsh, Survey 185, located 364 feet northwest of No. 4, is testing at 3,590-3,639 feet; No. 7 Walsh, Survey 185, is location 2,050 feet to east line and 1,750 feet to north line.

Randado Field—Jim Hogg

Magnolia Petroleum Co.'s No. 25 Merchant's State Bank, Survey 415, located 1,550 feet to north line and 1,300 feet to west line, has derrick up.

Kitselman & St. Albans

K. & S. Corp.'s No. 57 Holbien, Survey 17, Block 40, located 330 feet to NE cor., is fishing for drill stem at 3,600 feet. William F. Morgan's No. 1 Hinnant, Block 28, Share 1, at 450 feet to east line and 150 feet to south lines, has been spudded in.

Alworth Pool

Alworth Brothers' No. 13 Garza, Survey 39, Block 6, located 150 feet to southeast lines and 450 feet to southwest lines, at 1,012 feet made 8,000,000 feet of gas and is being deepened.

Schott Field—Webb

Magnolia Petroleum Co.'s No. 8 Garcia, Survey 58, located 1,237 feet to west line and 150 feet to north line, is on sand at 1,559-61 feet.

Albercas Field

Newton Drilling Co.'s No. 1 Bruni, Block 65, located 225 feet to east line and 1,470 feet to south line, at 2,160-80 feet in sand with top testing 30,000,000 feet of gas and bottom of sand showing oil, casing was set and well completed gauging 40,600,000 feet. O. W. Killam's No. 5 Bruni, Block 65, located 210 feet to east line and 150 feet to north line, at 2,176 feet, made 3,000,000 feet of gas and has been abandoned; No. 6 Bruni, Block 34, located 565 feet to west line and 150 feet to north line, has derrick up.

Aviator Field

Pittman & Moriarty's (Radio) No. 1 Puig, Block 4, located 500 feet to east line and 850 feet to north line, is drilling at 1,600 feet. Columbia Petroleum Co.'s No. 16 Puig, Block 75, located 301 feet to east line and 600 feet to south line, is coring for sand at 1,750 feet.

Carolina-Texas Field

D. J. Simmons' No. 2 de la Garza, Survey 335, Block 8, at 150 feet to SW cor., is standing at 400 feet. Woodward and others' No. 1 Webster, NW NE NW Survey 684, located 150 feet to NW cor., is testing at 3,004-10 feet. Houston Oil Co.'s No. 2-A Barnsley, Survey 268, Block 12, at 400 feet to north line and 350 feet to west line, is location. Haynes-Barnsley Syndicate's No. 1 de la Garza, Survey 335, Block 22, at 150 feet to SE cor., at 2,000 feet tested some oil, gas and salt water and is drilling deeper.

Cole Gas Field No. 2

Cole Petroleum Co.'s No. 43 Benavides, Survey 412, Block 13, located 1,060 feet to east line and 450 feet to south line.

(Continued on Page 113)

SALT WATER NOT REGARDED SERIOUS MENACE IN CALDWELL COUNTY TEST

By B. D. Stevenson

SAN ANTONIO, Tex., Aug. 8.—The Texas Company's No. 1 Beatty in Caldwell County 2 miles east of Dale, reported last week as probably opening a new pool in the Serpentine, topped at 2,121 feet, has furnished further evidence of it since then. It swabbed 75 bbls. of oil Wednesday night of last week after it began to show salt water. Friday afternoon it swabbed about 250 bbls. of oil. The water does not seem to be counted so seriously. Wells in the Lytton Springs Field, 5 miles northwest, made a slight amount of salt water at the base of the Serpentine and top of the chalf. This well seems to have made more than those in the Lytton Springs Field. There were only a few wells in the Lytton Springs Field that showed salt water and those only a minor amount. Royalties have changed hands since the salt water showing on a basis of $350 an acre for an eighth. Satisfied that it is a field and that owners of acreage will soon be in the field with rigs, Pat Armstrong has anticipated the situation and is laying a 10-mile 5-inch water line from Lockhart at the city springs to furnish water to the new field.

The well was first drilled to 2,179 feet where it was 58 feet in the Serpentine. It showed oil but when bailed mud came in around the packer. Casing was set in cement and the well deepend 92 feet where it topped Austin chalk. The Humble Oil & Refining Co. owns offsets to the well and has driven a stake for a location. Sun Oil Co., E. L. Smith, Smilock, Atlantic and Marland have nearby acreage. The Smilock well due north of The Texas Company's well had 220 feet of dry Serpentine. There is no safety, however, in saying that marks the northern limits of the field for there were inside dry holes in the Lytton Springs Field. First impressions, however, are that the field will extend somewhat to the south of The Texas Company's well and probably east and west from it also.

In Caldwell County, a short distance east of Lockhart, the Calco Petroleum Co.'s No. 2 Thomas tested for about 2 bbls. at 1,524-1,644 feet. There was no Serpentine. No. 1 Thomas, a few hundred feet northwest, had 18 feet of Serpentine at 1,450-68 feet and had a little oil also. No. 2 Thomas will be drilled deeper and failing to pick up production, Corsicana people will probably drill 900 feet to the southeast. No. 2 was drilled expecting to find more Serpentine than in the No. 1.

Brooks County

The Texas Company's No. 3 Lasater, Survey 329, is location 2,380 feet to north line and 450 feet to west line.

Duval County

Schlessinger Oil Corp.'s No. 1 Moody, Survey 60, at 330 feet to north line and 1,650 feet to east line, is moving in machinery. National Oil Co.'s No. 1 Ball, Survey 16, located 450 feet to north line and 150 feet to east line, is moving in machinery. Humble-Reiter-Foster's No. 6 Kohler, Survey 400, at 60 feet to west line and 660 feet to south line, is drilling at 2,532 feet.

Hidalgo County

Queen City Oil & Gas Co.'s No. 1 Adams, Lot 1, Block 82, Capisallo district, is drilling around 2,000 feet.

Jim Hogg County

Paizano Oil Syndicate's No. 1 Camp-

(Continued on Page 113)

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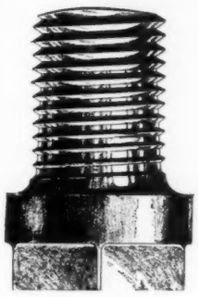

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Three Saline Domes in Waller County

Section 85 Miles Inland From Gulf of Mexico Becoming Active. Two More Producers Completed in Austin County

By P. L. McGreal
Staff Correspondent, Gulf Coast Fields

HOUSTON, Tex., Aug. 8.—A total of 8,380 bbls. of new production was developed in the Gulf Coast pools during the week ending August 6, of which 2,250 bbls. are credited the South Louisiana districts. This is the largest amount in more than 90 days. The existence of three saline domes in Waller County, as shown by geophysical explorations, was a feature of the week's news and leasing is rather active in the vicinity of the locations. Waller County is some 85 miles inland from the Gulf of Mexico.

The completions during the week number 20, of which 5 were dry and one a salt water hole. Ten wells are bailing. Six of the completions are semiwildcats and three of these are dry. The other three show 185 bbls. of new production. The Humble Oil & Refining Co.'s No. 1 Deitrick in the Racoon Bend section of Austin County, across the Brazos River to the west of Waller County, is rated at 15 bbls. at 1,015 feet with 15,000,000 feet of gas, and its No. 1 Woodley there is credited with 20 bbls. at 920 feet.

The Pure Oil Co.'s No. 5 in Sweet Lake, Cameron Parish, Louisiana, some 35 miles south of Lake Charles, is swabbing 150 bbls. per day at 4,506 feet. The Sweet Lake district was opened by the Pure Oil Co. in October, 1926, with No. 3, which flowed 185 bbls. initial, 28 gravity oil, at 5,897 feet. The gas pressure was very strong, registering 1,500 pounds. It is the deepest producer in the Gulf Coast. The company is now drilling No. 4 there around 5,025 feet.

The Humble Oil & Refining Co. and the Valley Oil Co. jointly started drilling in the Raccoon Bend section of Austin County early this year, following geophysical tests with both the seismograph and torsion balance. A dozen shallow wells have been drilled to 1,000-1,450 feet. The first producer was No. 2 Thompson early in April, with initial output of 33 bbls. on the beam at 1,007 feet. It is still pumping 20 bbls. per day. No. 1 Walton drilled previously was a gasser at 1,100 feet. Fuel for the subsequent drilling was supplied from this well. A location has been made for No. 1 Gotoskey, nearly 1 mile southwest from No. 1 Walton.

Gross Production

The estimated daily average gross production of the Coastal pools for the week is placed at 143,097 bbls., an increase of 1,622 bbls. over last week. The South Louisiana pools are credited with 17,845 bbls. of the gross amount. The output from those districts is increasing with new work in the Edgerly Pool and at Vinton.

The estimate for each pool is as follows:

Pool—	Dy. ave.
Boling	2,450
Batson	1,282
Blue Ridge	3,900
Big Creek	3,120
Barber Hill	1,000
Dayton	355
Damon Mound	885
Edgerly (La.)	2,300
Goose Creek	7,880
Humble	4,325
Hull	15,065
High Island	175
Jennings (La.)	1,275
Lockport (La.)	6,000
Markham	450
Nash	810
Orange	5,400
Orchard	65
Pierce Junction	6,270
Piedras Pintas	95
Spindletop	54,000
Saratoga	1,170
Sour Lake	4,175
South Liberty-South Dayton	2,650
Stark (La.)	600
Vinton (La.)	7,200
Welsh-Anse La Bute (La.)	20
West Columbia	9,210
*Miscellaneous	970
Total	143,097

*Includes Nacogdoches, Washington, Kleberg and Austin Counties, and Cameron, Calcasieu and Iberia Parishes, Louisiana.

Southwest Texas

The estimated daily average gross production of the Southwest Fields is placed at 31,985 bbls., a decrease of 410 bbls. compared with the previous week. The Mirando districts declined 300 bbls.

The estimate for each field is as follows:

Field—	Dy. ave.
Luling	16,500
Mirando	11,500
Somerset	1,000
Callihan	25
Rockdale-Minerva	1,060
Lockhart (Lytton Springs)	1,900
Total	31,985
Gross for week	175,082
Gross last week	173,870
Net increase	1,212

Wells Completed

The Hull Pool made the best record for the week, with 2,725 bbls. new production, all of which, however, comes from old territory there. The Republic Production-Houston Oil Co.'s No. 74 Dolbear, a worked-over hole, responded with a flow of 2,500 bbls. per day at 2,325 feet. Late in the week it had dropped to 1,000 bbls. per day. Same interests' No. 102 Dolbear will make a pumper at 2,125 feet. The Big Dome Oil Co.'s No. 1 Palmer, also a work-over, is pumping 25 bbls. of oil and 100 bbls. of salt water at 800 feet. The Mecom Oil Co.'s No. 1 Taylor, another worked-over well, is bailing at 1,850 feet.

Smith & Long's No. 1 Parsons, on the northwest flank of the Pierce Junction Pool, was finished late in the week at 4,525 feet, flowing 2,500 bbls. The Rio Bravo Oil Co.'s No. 8 Settegast on the northwest side, is swabbing at 3,640 feet.

The old Edgerly Pool in Calcasieu Parish, opened 15 years ago, is reviving following seven years of practical stagnation. Operators have gone back on the north side and are finding some nice wells in territory considered drained. Last week the Gulf Refining Co.'s No. 42 Bright-Penn came in at 3,500 feet flowing 1,500 bbls., but late in the week it had dropped off to 600 bbls., showing 15 per cent sediment and water. The Hercules Oil Co.'s No. 2 Paraffine is flowing 500 bbls. at 3,450 feet. The Rex Oil Co.'s No. 6 Hunter is bailing at 3,535 feet.

In the Lockport Pool, the Vacuum-Gulf Co.'s joint No. 6 Miller was deepened to 4,450 feet and will make a pumper. Same interests' No. 4 Farquhar is bailing at 4,400 feet.

Marrs McLean's No. 9 Gray in the Vinton Pool is good for 100 bbls. at 1,750 feet. The Vinton Petroleum Co. abandoned No. 37 Gray at 2,500 feet.

In the deep sand section at Spindletop, the Magnolia Petroleum Co.'s No. 4 fee is heading 435 bbls. at 5.025 feet. The Sun Co. abandoned No. 2 McLean after drilling it deeper to 5,970 feet.

In the Goose Creek Pool, the Gulf Production Co.'s No. 2 Hoffman-Smith is pumping 125 bbls. at 2,950 feet. The Port City Oil Co. worked over No. 2 Adey at 2,090 feet. It is making 85 bbls. of fluid, 50 bbls. of which is oil. The Gulf Production Co.'s No. 14 Chapman-Bryan is bailing at 4,530 feet.

W. E. Woodruff's No. 2 Adams at Blue Ridge went into salt at 800 feet and was abandoned. The Navarro Oil Co.'s No. 4-B Robinson on the northwest flank, will pump at 3,275 feet. The Gulf Production Co.'s No. 11 West-Schenck on the south flank of the dome is bailing at 3,900 feet.

The Sun Oil Co.'s No. 76 Paraffine in the Batson Pool is a small pumper at 1,175 feet.

The Peer Oil Co.'s No. 5 Harrison on the east side of the Trinity River in the South Liberty district was worked over into a 40-bbl. pumper at 3,400 feet.

The Sun Oil Co. quit No. 1 Farmer on the northeast flank of the Boling Dome at 1,205 feet.

The Bennett Production Co. is setting strainer in No. 1 Kirby at Barber Hill at 4,900 feet for a test.

The Rycade Petroleum Co.'s No. 2-B Kountz on the southwest side at Markham in Matagorda County is preparing to test at 3,698 feet. The Houston-Gulf Gas Co. set surface casing in No. 4 Sisk there. The Moody Oil Co.'s No. 3 Myers and No. 4 Gray are gas wells.

The Texas Company's No. 25 Arnold on the south end of the West Columbia Pool is bailing at 4,380 feet.

The Humble Oil & Refining Co.'s No. 1 Warren on the southwest side of the old Hockley Dome in Harris County, 25 miles northwest of Houston, is bailing with 6⅝-inch casing set at 3,805 feet. Strainer was set in 11 feet of sand. It is a semiwildcat proposition. Hockley Dome has been drilled on and around for the past 20 years without finding paying production.

The Roxana Petroleum Corp. abandoned No. 4 Clemens Dome in Brazoria County at 5,090 feet. The Gulf Production Co. quit No. 5 Beard off the Long Point Dome in Fort Bend County at 3,625 feet. t is one of the deepest tests to date there. The location is between the Big Creek and the Damon Mound Pools.

Drilling in the Pools

Practically all the drilling being done in the Texas Coastal pools is that of the major corporations, very few so-called independent companies or individuals showing any activity. Over in Coastal Louisiana some small companies are drilling in the Edgerly and Jennings Pools. The same statement applies to wildcat operations. The operator of limited capital, once so active in the Humble, Goose Creek, Sour Lake, Batson and other pools has disappeared. Some are located in the North Louisiana-Arkansas fields; others in the North Central Texas and the newer fields in the Panhandle and West Texas sections. The few that remain in the Gulf Coast can be counted on the fingers of both hands and most of these are devoting their energies to speculating in leases and royalties.

The reasons for the migration of the once active small operator and producer are: First, the era of deeper drilling in the older Coastal pools with the consequent increase of cost of drilling and producing crude in such sections. A second reason is the fact that acreage within range of production in the newer pools, such as Big Creek, Spindletop and Lockport, La., is held almost exclusively by the major corporations and nothing is left for the small operator except acreage too far out to be considered even prospective.

Waller County Dome

Waller County is the latest geophysical discovery. A saline dome is said to have been found near San Felipe on the west side of the Brazos River near what is known locally as McDowell's ferry. It was located primarily by the Gulf Production Co., which holds some 3,500 acres under lease. The Humble Oil & Refining Co. and The Texas Company are reported to have secured 3,000 and 2,000 acres, respectively. The prices paid range from $5 to $25 per acre. Buyers of royalties have been interviewing the land owners, paying as high as $50 per acre for one-half the one-eighth retained by the land owner. Another dome has been located northwest of Pattison, which is 6 miles west of Brookshire. George Newman and associates have been drilling shallow tests in that neighborhood and are now starting No. 6. Still another saline mass is said to be located on the Young ranch and adjoining lands, 10 miles north of Pattison.

Some Deep Holes

Such drilling as is being done in the defined pools is largely routine, with the exception of deep tests. Efforts to extend the productive limits have proven futile and the large companies are now searching for productive deep sands.

In the deep sand section of the Spindletop Pool, off the southwest side of the original cap rock production, most of the extremely deep holes are on the south end. The Magnolia Petroleum Co.'s No. 5 fee set 6⅝-inch casing at 5,175 feet and is now around 5,400 feet. The Sun Oil Co. is breaking the record there for the number of deep sand tests it has under way. No. 12 McLean is around 6,160 feet. No. 15 McLean at 5,500 feet. No. 1 Price is drilling ahead at 5,760 feet, and No. 3 Price is around 5,124 feet. The Gulf Production Co.'s No. 12 Mann is at 4,950 feet in the second hole. George White's No. 3 Busch is drilling around 5,000 feet. The Texas Company's No. 1 Garrick, one-half mile north of production, is at 5,930 feet.

The Humble Oil & Refining Co.'s No. 1 Kirby on the east side of the Barber Hill Dome is drilling below 5,500 feet. It is the depest test to date there. Same company's No. 71 Smith on the east side of the Goose Creek Pool is below 5,110 feet.

On the south end of the Orange Pool, the Gulf Production Co.'s No. 4 Granger is drilling below 5,135 feet.

The Rycade Petroleum Corp.'s No. 12 Nash in the Nash Pool in the line of Brazoria and Fort Bend Counties is drilling around 5,500 feet. This, too, is the deepest test in the history of that district.

The Texas Company is making a deep test in No. 1 Sterling on the northwest side of the Batson Pool. It is now around 2,800 feet.

Over in the Lockport Pool, near Lake Charles, La., the Vacuum-Gulf company's joint No. 2 Friedberg & Wolf is fishing at 4,850 feet.

In territory outside of the present producing dome pools, the Roxana Petroleum Corp.'s No. 2-A Pabst, Clemens Dome, is drilling below 6,070 feet. Its No. 1 on the San Bernard River, which flowed and sanded three months ago, is cutting the liner to deepen from 5,141 feet. This dome was located geophysically late in 1925.

Off the Fannette Dome in Jefferson County, southwest of Spindletop, the Gulf Production Co.'s No. 3 Bordages is drilling around 6,110 feet.

The Gulf Co.'s No. 3 Seaborn, off the Hawkinsville Dome in Matagorda County, is below 4,233 feet.

In the South Louisiana parishes, the Border Research Corp.'s No. 1 in Calcasieu Lake, Calcasieu Parish, is drilling below 5,200 feet.

The Pure Oil Co.'s No. 3 in Sweet Lake in the southern part of Cameron Parish is drilling around 5,045 feet. The Yount Lee Oil Co.'s No. 4 in Black Lake in that parish is idle at 4,805 feet.

The Border Research Corp.'s No. 1 in Grand Lake is idle at 4,520 feet.

The Roxana Petroleum Corp.'s No. 4 Allen, on the bank of the San Bernard River, off the Allen Dome, Brazoria County, is drilling in 15 feet of sandy shale, showing oil at 4,258 feet. The Pure Oil-Humphreys Corp.'s joint No. 1 Armstrong on the north side of the Stratton

(Continued on Page 127)

Utah Test Gets Good Oil and Gas Show

Union of California May Get Producer on Lisbon Dome. Colorado Well Reaches Sundance but Failed To Find Oil

By Tolbert R. Ingram
Staff Correspondent, Rocky Mountain Area

DENVER, Colo., Aug 8.—A favorable showing of oil and gas in the Union Oil Co. of California's test on the Lisbon Dome in San Juan County, Utah, which has revived interest in that region; a failure in the first test to reach the Sundance sand in northwestern Colorado following the bringing in of a 2,600-bbl. well in that horizon by the Midwest Refining Co. last March; and the completion of a 250-bbl. shale well in Routt County, Colorado, by the Texas Production Co., were the outstanding features of the week in the Rocky Mountain district.

The Marland Oil Co. of Colorado's No. 1 Clark, SW NW Section 21-3n-91, Thornburg Dome, Moffat County, Colorado, suspended drilling at 3,035 feet, approximately 200 feet in the red beds, or Chugwater formation. It will be plugged back to 2,157 feet and made into a gas well, at which depth it had an aggregate flow from the sands in the Dakota of 45,000,000 feet of gas. The well is a joint operation with the Prairie Oil & Gas Co. and was deepened from 2,157 feet to test the Sundance sand following the bringing in of a big well in that horizon on the Iles Dome by the Midwest Refining Co. a few months ago.

The failure of the Clark well to develop commercial production in the Sundance was a keen disappointment. It was the first of a number of wells started to the Sundance to reach the obecjtive following the Midwest discovery. The test went through a hard caprock at 2,602 feet and into a sandy shale. At 2,603 feet, in the top of the Sundance, the well made a good show of gas, and oil came up into the hole for a little more than 100 feet. However, the oil and gas did not show any material increase with depth and a little water commenced to creep in. It was making about 2 bailers of water per hour at 2,666 feet, the true sand having been topped at 2,640 feet. There was 1,000 feet of water in the hole at 2,667-95 feet with another oil show at 2,680 feet. The hole was in light yellow pink sand at 2,710 feet, and at 2,812 feet it was still in sand and making sufficient gas to cause the water in the bailer to slop over. A red sand, afterwards accepted as the top of the red beds, was encountered at 2,835 feet in which drilling continued to 3,035 feet. The red beds are estimated to be 3,000 feet at that location and it was decided that nothing would be gained by trying to go deeper.

Significance of Test

The significance of this test is tied up with the bringing in of a big well in the Sundance in the Midwest Refining Co.'s No. 4 Parkinson, SW SE Section 22-4-92, Iles dome, about 5 miles to the northwest, last March. The extensive wildcattiing campaign in northwestern Cololorado in 1924 and 1925 was directed primarily to the develping of production in the Dakota sands following the bringing in of the Moffat Dome, 5 miles to the northeast of the Iles Dome, by the Texas Production Co. in the winter of 1923-24, in the Dakota horizon. Several Dakota sand tests on Iles had failed to yield anything but water though some oil was encountered in the shale above the objective horizon. The Thornburg Dome yielded 3 large gas wells, and some water wells on the flanks. Tests of the faulted area to the south and north of the top of the Iles Dome also proved failures. Similar results in the Dakota were found in the other structures in Moffat and Routt counties and the operators were very much discouraged.

The Midwest decided upon a deep test in its No. 4 Parkinson. The company was on the point of abandoning the well when at 3,242 feet it blew in as a producer in the Sundance, making as high as 2,600 bbls. a day until beaned down to around 500 bbls. at which it is still held. This discovery revived interest in the region and the companies went back, reviving oil leases, taking new ones and renewing operations on a considerable scale. The Marland's No. 1 Clark was the first of the new operations to reach the objective. While it was a disappointment, there were some favorable features. It was originally drilled a little off of the top of the structure in hopes of missing the gas found in the Dakota in the other wells and finding the oil, but it proved to be a gas well like the others.

Moffat and Iles Domes

Marland, jointly with the Union Oil Co. of California, started No. 9-A Wymore on SE NW Section 16-3-91, Thornburg Dome, but is shut down at 1,657 fee following the failure in the No. 1 Clark, it being a little lower on the structure. Interest in the Sundance sand tests now center on the Moffat and Iles Domes. Texas Production Co.'s No. 10 Knowlton, Section 33-5-91, Moffat Dome, probably will be the first to reach the objective. It is bottomed at 4,105 feet, underreaming and cleaning out, with about 200 feet to go. It is through the Dakota sands and the Morrison, all of which contained water. Texas Production Co.'s No. 1 Parkinson, SW Section 23-4-92, Iles Dome, is bottomed at 2,915 feet, in the Dakota formation, and same company's No. 2 Parkinson, SW Section 23, is at 2,914 feet, having a flow of 1,200 bbls. of water from the Dakota topped at 2,835 feet. Midwest Refining Co.'s No. 18-SD Parkinson, NW SW Section 23-4n-92, is in the Dakota at 2,900 feet with the hole full of water. Same company's No. 34-SD Parkinson, SE SW Section 22, is drilling in the Frontier at 2,235 feet, and its No. 4-SD Shaw, NW NE Section 27-4n-92, is running 12½-inch casing at 2,200 feet. All of these wells have around 500 feet to go after getting through the Dakota before they reach the Sundance. Water in the Dakota sands was expected.

Good Shale Well

Twenty-five miles east of these operations, in the Tow Creek pool in Routt county, the Texas Production Co. has a good shale well in its No. 4 Quaintance, NE NE Section 18-6-86. The well topped the pay at 2,610 feet, swabbing 75 bbls. in 11 hours. It was deepened to 1,625 feet and made 150 bbls. Another 10 feet brought the production up to 250 bbls. The company now has 9 producers in this pool making around 1,000 bbls. a day. The oil all comes from the Mancas shale above the Dakota sand. The sand was found water bearing. However, the company is making a test to the Sundance in its No. 3 Belle Dennis, Section 8-6-86, which is bottomed at 2,601 feet where the 6¼-inch casing was cemented. The wells producing from the shale in this area show a remarkable record for long-lived production, some of them having flowed natural for some time.

About 50 miles to the northeast of the Tow Creek Dome, on the Walden, or North McCallum Dome, the Continental Oil Co. has several tests under way following the bringing in of its No. 1 Sherman, a freak well making oil with carbon dioxide gas, last December. This well had a small show of oil at a shallow depth which was passed up to make the deep test. Its No. 1 Pollock, SE SE Section 2-9n-79, half a mile northwest of the discovery, encountered a sandy shale at 670 feet, probably the Hygiene of Wyoming, which showed for about 50 bbls. It was cased off to continue as a deep test and a shallow test was started in No. 2 Pollock near the deep well. It proved to be dry at 760 feet. Same company's No. 1 Hoye, SE NE Section 34-9n-78, on the South McCallum Dome, is drilling at 610 feet. No. 1 Peterson, a deep test being drilled with a rotary on SW SW Section 1-9-79, half a mile north of the discovery, is drilling at 2,540 feet. No 1 Morris, SE SE Section 34-10n-79, failed to find the shale production and was dry at 1,000 feet.

Fort Collins District

The Fort Collins district has only one operation under way, this being Union Oil Co. of California's No. 6 Buckeye on Section 31-10-68, which rigged up and ready to spud.

The only wildcat in the Denver basin (plains region in northeastern Colorado) showing anything of interest is the Northeastern Colorado Oil & Gas Co.'s No. 1 State, Section 36-8n-55, Willard Dome, Logan County, which is drilling below 4,420 feet and carrying 6¼-inch casing at 4,350 feet. This is the deepest test so far drilled in that region where geologists have differed as to the depth to the Dakota sands. Early government reports estimated the depth at around 7,000 feet. A report made in 1924 by the United States Geological Survey, estimated the sands at a much shallower depth. The company's geologist gave hope for expecting the sands at around 3,800 feet. It is now considerably below that depth and so far as is known, no definite markers have been found to give a clue as to the horizon in which it is working. The hole is in good condition and the operators in this district are hopeful that it will be carried as deep as possible to settle a mooted question.

South Central Colorado

In the south central part of the state the Phillips Petroleum Co. is abandoning its No. 1 Niles, Section 27-16s-65, El Paso County, at 3,570 feet, in the Morrison. The Dakota sand was cut at 2,645-2,750 feet and was dry. It was a true sand, 105 feet thick, topped by 24 feet of sandy shale. The Lakota was drilled at 2,826-64 feet when the hole went into the top of the Morrison formation. This is the second well drilled on this structure, the Ohio Oil Co.'s No. 1 on Section 17-16s-65 being abandoned at 3,010 feet after going through the Dakota.

The only operation in the southeastern part of the state showing anything of interest is the Parker Club of Colorado's No. 1 Adams, Section 32-34s-56, Las Animas County, a test to the Pennsylvanian, which had a good show of gas at 925 feet. The hole is now bottomed at 1,375 feet and the gas has continued to increase. No test has been made, but the gas appears to be mostly carbon dioxide and is important only in indicating the structure to be closed. The hole is working in the red beds and is approaching an interesting stage.

On the western slope B. C. Morrison's No. 1 Peerless, on the Hoel permit, Section 23-8s-104, Highline structure, Mesa County, entered the Frontier sand at 2,016 feet. The sand was dry at the top and showed a slight saturation. The hole is now 14 feet in the sand. This test, which is 75 miles south of the Rangely Dome in Rio Blanco County, and northeast of the Colorado River structures in Utah south of Moab, is attracting some attention. The Midwest Refining Co. had most of the acreage on the structure a few years ago under contracts with the Peerless Oil Corp., and others, and drilled 3 validating holes, but surrendered its leases on account of difficulties between the other parties which made progress impossible. These difficulties were straightened out a few months ago and the Peerless Oil Corp. was in a position to make a contract with B. C. Morrison to drill a deep test. Morrison installed a rotary rig over one of the Midwest validating holes and commenced drilling. The test commenced showing a little oil and gas in the base

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CO-OPERATIVE TEST IN MISSISSIPPI; TWELVE TESTS IN AMORY DISTRICT

AMORY, Miss., Aug. 8.—Of special interest in northeastern Mississippi drilling operations is the co-operative test to be put down by the Transcontinental Oil Co. and The Texas Company. A rig already is up for this test, the No. 1 on the Day farm, NW NW Section 18-16-18, Monroe County.

With work more or less routine in this part of Mississippi since the discovery gas well, the Amory Petroleum Co.'s No. 1 Carter, Section 7-31-17, was brought in last October making around 2,000,000 to 5,000,000 feet daily, this territory has been receiving very little general attention. However, there are 12 tests in the Amory district of which all but three either are drilling or have rigs or derricks up ready for drilling. The bulk of these are in Monroe County, as follows:

Amory Petroleum Co.'s No. 1 Dill, C W half SW Section 12-13-18, is down 2,415 feet where 6⅝-inch casing has been set. This company's No. 1 Hall, SE cor. SW SW Section 8-13-17, is shut down at 2,404 feet waiting orders. The 8-inch casing has been set at 2,397 feet. Buffalo Oil Co.'s No. 1 Crook, SE cor. NE NE Section 4-13-18, is shut down at 720 feet waiting rig parts. Ten-inch surface casing has been set at 319 feet. Natural Gas Petroleum Co. is rigging up cable tools to resume drilling in No. 1 Rye, NW cor. NE NW Section 22-15-17. This test is down 1,230 feet in hard rock encountered at 630 feet. A. M. Sutton is drilling hard rock at 648 feet in No. 1 Acker, SW SW Section 25-13-19. Ten-inch casing has been set at 361 feet. Transcontinental Oil Co. and The Texas Company have a rig up for No. 1 Day, NW NW Section 18-16-18. R. E. Zuendt's No. 1 Taylor, NE cor. NE SW Section 30-14-17, is shut down at 150 feet awaiting 10-inch casing. This test was started July 6. The discovery well, Amory Petroleum Co.'s No. 1 Carter, Section 7-31-17, still is producing more than 2,000,000 feet of dry gas from a total depth of 2,470 feet.

In Chickasaw County, Hightower & Goldstein are rigging up for No. 1 Davis, Section 20-13-3. Itawamba Oil & Gas Co. has a derrick completed for No. 1 Evans, NE NE Section 16-10-10, Itawamba County. Lee Petroleum Co.'s No. 1 Hickman, SW cor. SW Section 12-8-6, Lee County, has been shut down after drilling only to 37 feet. J. P. Evans is rigging up for No. 1 Whiteside, NE cor. SW Section 16-9-7, same county.

In Webster County, Cumberland Oil Co. is drilling at 1,290 feet in No. 1 Hesterly, Section 15-21-11.

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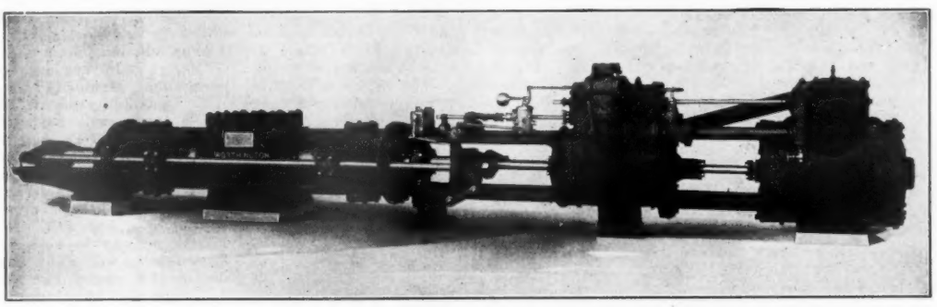
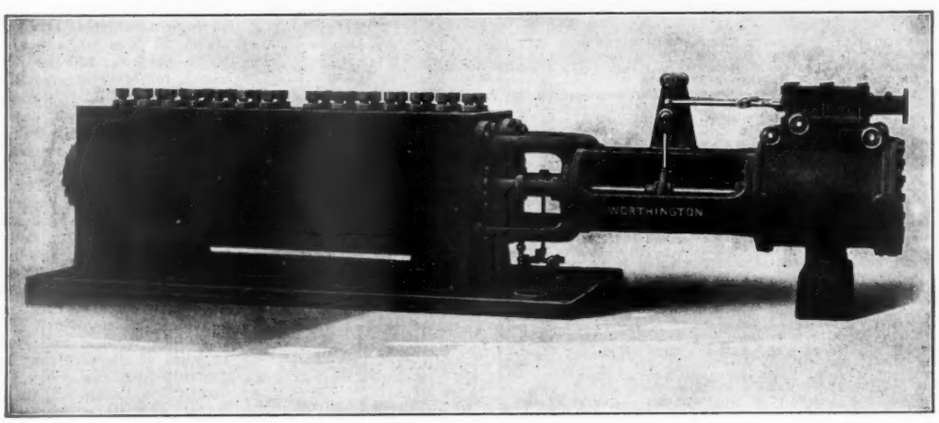
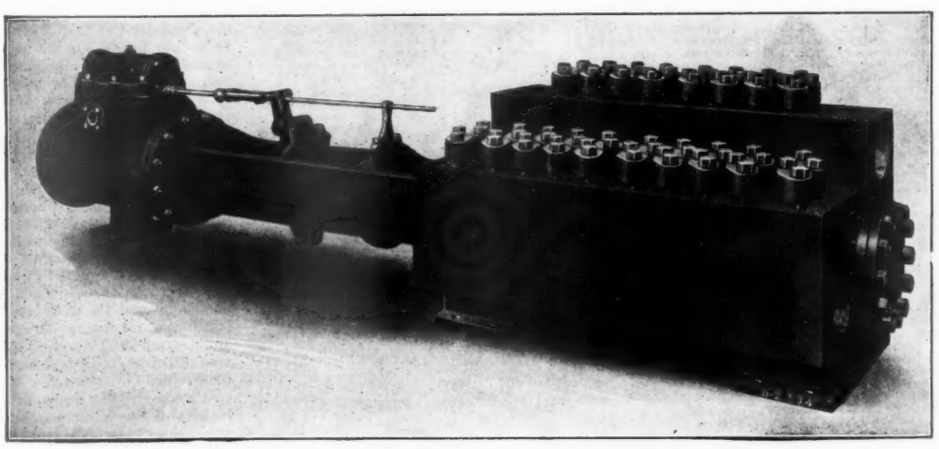


16"& 24"x 5"x 24"
Single Plunger
Pattern



18"x 8½"x 18"
Duplex Piston
Pattern



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Single Piston
Pattern

Piston and Plunger Patterns
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Seal Beach Drops Before Ascending

Decline Temporary as Deeper Drilling Proceeds in Wasem and Wahl Sands. Casa Loma Field, South of Bakersfield, Attracts Rush

By L. P. Stockman
Staff Correspondent, California Fields

LOS ANGELES, Calif., Aug. 6.—Completions at Seal Beach during the past seven days were few and far between but this drop was to be expected as the number of drilling wells is getting smaller each week. Deepening jobs have offset this loss to some extent, however, and it is this class of work which is expected to play an important part in rejuvenating production if the deep sand comes up to expectations. There are about 25 wells at present headed down in search of large deep production and as a result of this work Seal Beach daily production is expected to begin climbing again soon. The greater part of these projected deep zone wells are below the 5,000-foot level and hence something tangible as to the possibilities of deeper drilling should become manifest shortly. It is believed that two deep zones, the Wasem and Wahl, have been encountered in the town lot area and it is needless to say that operators are watching developments very closely.

Another week or 10 days should determine the future of Alamitos Heights, for during this period at least four deep tests should be in shape to strut their stuff. Paul Getty's No. 2 fee, a 2,350-bbl. well from 5,000 feet, and No. 1 Wahl of the Petroleum Securities, which is making a 35.1 gravity oil, tend to indicate that deep drilling will prove highly productive. The attitude of the latter company is evidenced by the fact that it already has five former producers headed down. Getty has also started preparations to take advantage of deep production by killing No. 1 Alamitos, a 250-bbl. well. The Richfield Oil Co.'s No. 1 Bonner, which came in flowing 2,800 bbls. per day in June of this year, died late last week and drilling has again been resumed. The General Petroleum, discoverer of the second or Wasem zone in the town lot section six weeks ago, with a 525-bbl. well, has two more deep projects just about ready for production. No. 3 Wasem got the top of the pay at 5,240 feet, while No. 5 picked it up at 5,235 feet. No. 9 on the same lease should find the lower sand at any time now as it only has a short distance to go.

The California Eastern Oil Co., which has finished something like five or six new wells during the past three weeks, has the deep sand in No. 1 Graves at 5,215 feet and a string of 6¼-inch has been landed at 5,080 feet preparatory to an early test. This company, by the way, added another new producer to its string this week by bringing in No. 1 Parr flowing 2,240 bbls. of clean 26.7 gravity oil daily from 4,920 feet. While on the subject of deep drilling it might prove of interest to mention that the Associated has a splendid looking prospect in No. 16 Hellman in the extreme eastern part of the older section of the Seal Beach Field. This well is showing up exceptionally good with a very heavy gas pressure at 5,291 feet and the outlook is excellent for a large flowing well. The sand found in this hole may be a new deep zone as all indications point in that direction, although, of course, the Selover may be dipping very rapidly at that point. The Marland started deepening four wells on the Selover lease immediately after finishing No. 11 Selover last week doing 2,510 bbls. per day from 5,070 feet and one of this quartet should get the pay some time early next week.

Huntington Beach

The San Martinez Oil Co. failed to develop deep production in No. 1 Hanke, an outpost in the extreme eastern part of the town lot section of Huntington Beach, but this well, which is on Ninth Street, a short distance from the ocean, is pumping 250 bbls. of rather dirty oil from the 3,945-foot level after being plugged back from 5,176 feet. No. 1 Hanke has been on a pumping test for the past two weeks in the hope that production might clean up, but so far this has failed to materialize. The Standard with six drilling projects actively under way on the Pacific Electric property which parallels the ocean front, is erecting rig and building the necessary retaining wall for another, No. 15, on the same property. The Standard has spent approximately $50,000 in the construction of a continuous retaining wall which serves a double purpose, that of affording adequate foundation for the rigs and also to prevent the drainage of drilling fluid or sump oil into the ocean water. The success which the California Petroleum has experienced on the Buck property out on the northwest front at Huntington Beach has resulted in a revival of interest in that particular section. Julius Fried recently spudded in a new well on the 60-acre Lindner property, while J. E. O'Donnell has just started work on No. 1 Gotthard. The latter is a little less than one-half a mile north and west of the California Petroleum's Buck lease, on which there are at the present time three pumping wells and No. 4, a driller down 3,308 feet. South of the Huntington Beach Field the Pan American has a rig going up for a conclusive deep test of the Newport area and actual drilling should get under way soon.

Long Beach

E. B. Giffen brought in his No. 1, a new well in the Long Beach Field, several days ago flowing 2,185 bbls. of 28.2 gravity oil daily from the deep sand at 5,340 feet and it has been holding up with exceptional regularity since completion with a possibility that it, like other similar projects, will hold up indefinitely. The Richfield Oil Co. has just spudded in a new projected deep zone well on the Kelly lease in this area and, since the location is in proven territory, only mechanical trouble can prevent the completion of a big well. No. 1 Kelly is located midway between No. 6 Haas, a large flowing well which has been no production for nearly two years, and No. 3 Lightburn of the Graham & Loftus Oil Co., brought in two months ago flowing 1,971 bbls. daily from 5,300 feet. No. 3 Lightburn, which is about 500 feet away from the Richfield's new spud, No. 1 Kelly, paid out 100 per cent in the first month following completion and it is at present flowing 2,200 bbls. daily with very little fluctuation from day to day. The Standard successfully finished No. 44 Baldwin Pacific, in the Inglewood Field early in the week. This well registered an initial pumping of 292 bbls. of clean 17.8 gravity oil daily from 2,015 feet, the hole being finished with an 8¼-inch oil string. No. 53 on the same lease, which is drilling ahead in the oil sand at 1,915 feet, should be on production within 14 days. There were no new wells finished in the Rosecrans Field, although the Union recompleted No. 3 Howard Park as a 210-bbl. flowing well from 4,977 feet. In spite of the fact that only a limited amount of drilling is being done at Dominguez, the Union will in all probability list a new well or two for completion in that section within two or three weeks. Torrance presents a similar situation with the Chanslor-Canfield Midway Oil Co. expected to finish No. 96 Del Amo in the immediate future. Development work at Santa Fe Springs has been more or less at a standstill for two years and, while there are some additional undrilled locations available, operators are somewhat reluctant to start new wells at this late stage as the day of big production has been over for a long time. The Shell, however, has just spudded in No. 12 Slusher, which will offset the abandonment of No. 7 on the same lease.

Ventura

The Shell completed No. 21 Taylor in the Ventura Avenue Field and incidentally increased its daily production 1,570 bbls., the oil being exceptionally clean and testing 30.2 degrees. This new well was dilled to 5,643 feet and finished with a 6¼-inch oil string. The Shell has two other drilling projects on the Taylor lease and a similar number on the Edison property which look good for early production. The Petroleum Securities is making good footage in No. 2 Willett and Nos. 2 and 3 on the Orton property, all three holes being down approximately 5,400 feet. No. 1 Willett, which this company completed two weeks ago, is still showing a rather high cut indicating the possibility of edgewater encroachment. No. 1 Orton, the first producing project finished by the Petroleum Securities at Ventura Avenue, is also producing an excessive quantity of water which tends to confirm that these two properties, in the southern part of the field, are very close to the outer limits. The water

IMPORTANT SOUTHERN CALIFORNIA WILDCATS

Company, well and location—	S-T-R	Depth	Status
General Pet., No. 1 Guiberson, Potrero	35- 2-14	Rig	dismantling
Cal. Eastern, No. 1 Cypress, Potrero	27- 3-14	5,043	suspended
Associated, No. 1 Cypress, Potrero	34- 2-14	4,450	resume work
Associated, No. 2 Cypress, Potrero	2- 3-14	5,507	suspended
Getty, George F., No. 1 Cypress, Potrero	35- 2-14	Rig	wait. devel.
Getty, Paul, No. 1 Cypress, Potrero	35- 2-14	Rig	wait. devel.
California Pet., No. 1 Arthur, Potrero	35- 2-14	Rig	wait. devel.
Cole, Fred E., No. 1 Cypress, Potrero	35- 2-14	Rig	wait. devel.
Dill Oil Co., No. 1 Cypress, Potrero	35- 2-14	Rig	wait. devel.
Walker, Fred, No. 1 Cypress, Potrero	35- 2-14	Rig	wait. devel.
Getty, George F., No. 1 Tubbs, Rivera	25- 2-12	4,601	gr. sd. drilling
Mont. Park Oil Co., No. 1 Browning, Monterey Park	26- 1-12	Mtl.	building rig.
Circle Oil Co., No. 1 Pomeroy, Manchester	23- 3-14	4,280	suspended
Shell, No. 1 Mission, San Fernando	4- 2-15	3,550	hd. sd. drilling
Sou. Calif. Drlg. Co., No. 1 Matteson, El Segundo	1- 3-15	4,870	plug back
Carr, O. P., No. 2 Foster, San Juan Capistrano	13- 8- 8	2,915	gr. sd. drilling
Thomason & McCoy, No. 1 Rinz, Saugus	27- 5-16	1,403	gr. sd. drilling
Southwest Pet. No. 1 Ramsauer, Watts	4- 3-13	2,209	hd. sd. drilling
San Clemente Oil Co., No. 1 Peck, Hawthorne	20- 3-14	2 111	hd. sd. drilling
West. Oil & Ref. Co., Well No. 1, Hawthorne	29- 3-14	Mtl.	building rig
White Behr, No. 1 Watson, L. A. County	21- 4-14	Rig	rigging up
Shell, No. 1 Allec, Placentia	31- 3- 9	2,037	congl. drilling
Standard, No. 1 Olive, Orange Co.	17- 4- 9	2,383	hd. sd. drilling
Standard, No. 1 Rindge, Palms	36- 1-15	Rig	in litigation
Hemet Pet. Co. No. 1 Ward, Riverside Co.	9- 5- 1	1,261	hd. sd. drilling

IMPORTANT NORTHERN CALIFORNIA WILDCATS

Associated, No. 1 Smith, Kettleman Hills	12-23-18	2,043	suspended
Bolsa Chica, Well No. 1 Kettleman Hills	30-23-19	2,900	sd. sh. drilling
General Pet., No. 1 Burbank, Kettleman Hills	30-23-19	3,105	pipe bad
General Pet., No. 2 Oschener, Kettleman Hills	26-22-18	3,996	gr. sd. drilling
General Pet., No. 1 Dome, Kettleman Hills	4-24-19	1,030	hd. sd. drilling
C. C. M. O., No. 1 McGlashan, Kettleman Hills	17-24-19	4,721	gr. sd. drilling
South Coalinga, Well No. 1, Kettleman Hills	35-24-19	2,602	suspended
Ahlburg Gas Co., Well No. 1, Kettleman Hills	7-23-23	Rig	standing
Milham Explth., No. 1 Kettleman, Kings Co.	2-22-17	3,598	pipe bad
Shell, No. 2 Berlywood, Moorpark	32- 3-20	4 370	hd. sd. drilling
C. C. M. O., No. 1 Hobson, Ventura Co.	22- 3-24	6,545	will test
C. C. M. O., No. 1-B Hobson, Ventura Co.	16- 3-24	4,900	sd. sh. drilling
C. C. M. O., No. 1 State, Ventura Co.	17- 3-24	150	electric equip.
C. C. M. O., No. 1 U. S., Ventura Co.	17- 3-24	Mtl.	building rig
Continental Oil Co., No. 1 Burnham, Ventura Co.	22- 5-18	2,930	gr. sd. drilling
Standard, No. 1 Camarillo, Ventura Co.	29- 2-20	5,469	testing
Standard, No. 1 Montalvo, Ventura Co.	17- 2-22	6,595	hd. sd. drilling
Petroleum Sec., No. 1 Diablo, Ventura Co.	26- 5-18	2,785	fishing
Parkford, E. A., No. 1 Strathern, Ventura Co.	5- 2-18	3,600	hd. sd. drilling
Star Petroleum, No. 1 Canet, Ventura Co.	13- 3-23	5,240	fishing
Richfield, No. 27 Piru, Ventura Co.	35- 5-18	1,580	gr. sd. drilling
Milham Explth., No. 2 Buttonwillow, Kern Co.	8-28-23	4,662	clean, out.
Milham Explth., No. 3 Buttonwillow, Kern Co.	7-29-24	4,019	test for gas
Pacific Eastern, No. 1 Bakersfield, Kern Co.	6-30-28	4,392	kill to deepen
Kerwin & Seal, No. 1 Edison, Kern Co.	4-30-29	Rig	rigging up
Getty, George F., No. 1 Edison, Kern Co.	22-29-29	Mtl.	building rig
Royal Pet., No. 1 Machado, Kern Co.	31-30-28	Mtl.	building rig
C. C. M. O., No. 1 Quinn, Delano	23-25-27	2,281	sd. sh. drilling
Standard, No. 1 Bacon, Kern Co.	27-28-20	4,370	to abandon
Petroleum Sec., No. 1 Aniotz, Monterey Co.	2-23- 9	2,631	hd. sd. drilling
Richfield, No. 1 Wreden, San Luis Obispo Co.	10-29-17	721	cemented
Shell, No. 1 Cowell, San Mateo Co.	8- 6- 5	4,074	hd. sd. drilling
Shell, No. 1 Murphy, Petaluma	29- 5- 6	5,820	hd. sd. drilling
Shell, No. 1 Ielmorini, Sonoma Co.	14- 5- 7	2,145	hd. sd. drilling
Thomas & Hammill, Well No. 1, Alameda Co.	16- 3- 3	1,172	hd. sd. drilling
Continental, No. 1 Sargent, Santa Clara Co.	31-11- 4	2,600	hd. sd. drilling
Elliott & Clarke, No. 1 Marcos, Santa Barbara Co.	34- 7-29	Rig	rigging up
Becker, G. F., No. 1 Summerland, Santa Barbara	33- 4-25	3,049	sd. sh. drilling

TANKER SHIPMENTS FROM LOS ANGELES TO ATLANTIC AND GULF COAST PORTS

Commodity—	Total This Week	Daily Average	Total Last Week	Daily Average	This Year to Date	Same Time Last Year
Crude oil	597,394	85,342	142,231	20,319	5,614,101	7,940,910
Fuel oil	66,185	9,455	152,648	21,807	4,846,095	3,590,875
Diesel and gas oil	71,769	10,257	.....	.....	1,835,603	1,565,654
Gasoline	190,801	27,257	155,828	22,261	4,886,297	4,129,785
Tops	.....	.....	.....	.....	.....	149,906
Coastwise—						
Crude oil	568,171	81,167	606,977	86,711	15,595,959	14,247,015
Fuel oil	227,275	32,468	185,369	26,481	6,946,037	5,963,151
Diesel and gas oil	.....	.....	20,098	5,303	211,381	136,782
Gasoline	303,681	43,383	250,037	35,720	5,391,785	4,363,411
Kerosene	.....	.....	37,124	2,871	105,769	138,950
Tops	.....	.....	.....	.....	62,570	430,579
Exports—						
Crude oil	63,339	9,120	.....	.....	1,644,733	2,642,625
Fuel oil	188,513	26,930	805,477	115,068	16,368,131	10,054,980
Diesel and gas oil	.....	.....	66,145	9,449	827,276	264,974
Gasoline	213,669	30,524	164,392	23,485	2,547,858	2,770,473
Tops	.....	.....	.....	.....	227,204	.....
Kerosene	66,868	9,553	.....	.....	1,382,830	1,466,102

TANKER SHIPMENTS FROM SAN FRANCISCO TO ATLANTIC, GULF COAST PORTS

Diesel and gas oil	.....	.....	.....	.....	505,608	1,017,804
Gasoline	.....	.....	75,369	10,767	1,260,461	701,990
Tops	.....	.....	.....	.....	.....	73,698
Lubricants	.....	.....	.....	.....	244,826	215,617
Coastwise—						
Fuel oil	121,929	17,418	.....	.....	3,247,364	3,315,343
Diesel and gas oil	.....	.....	.....	.....	207,012	.....
Gasoline	46,342	6,620	230,958	32,994	3,166,410	2,730,702
Kerosene	3,791	542	.....	.....	149,472	258,897
Exports—						
Fuel oil	72,803	10,400	75,182	10,740	1,416,897	2,280,103
Gasoline	133,515	19,074	.....	.....	1,946,319	1,170,455
Kerosene	74,509	10,644	.....	.....	865,156	1,251,859
Lubricants	.....	.....	.....	.....	9,120	18,051

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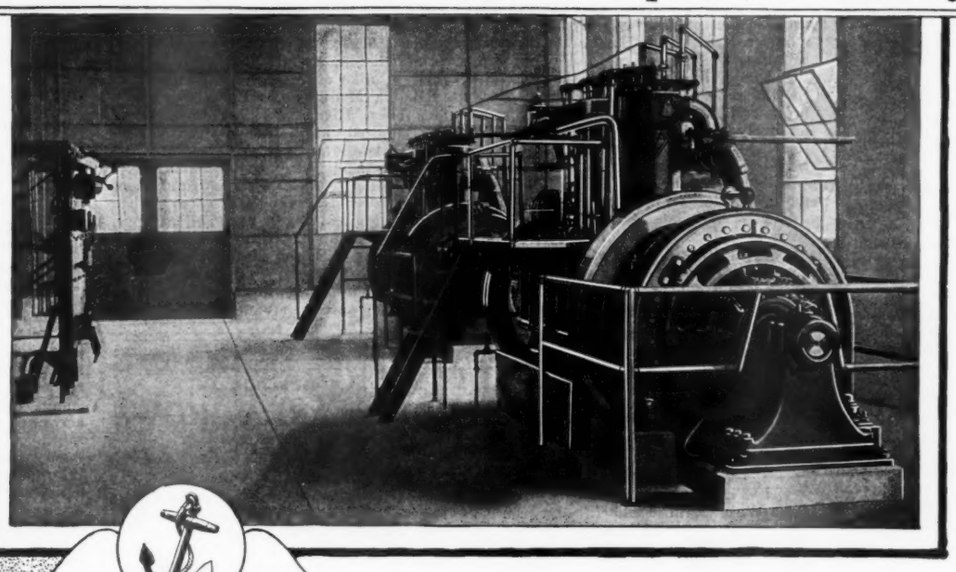

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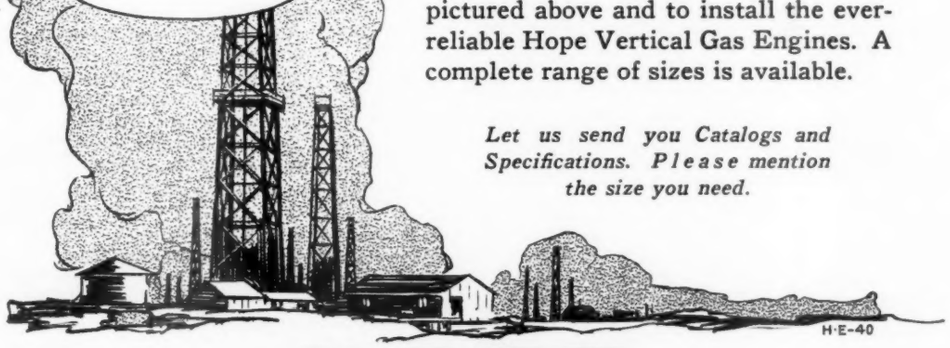

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which No. 1 Willett and No. 1 Orton are producing separates quite readily from the crude oil when run through a trap and is not causing any particular inconvenience as far as disposition of the oil is concerned. The Bolsa Chica Oil Co. recently put No. 3 Hartman on a production test in the upper zone at 4,500 feet but the failure to develop commercial production has resulted in a resumption of drilling. G. J. Magenheimer's No. 1 Hartman, north of the Bolsa Chica's holdings, is showing up quite promising and an early test is contemplated with the outlook good. The Associated is only doing a normal amount of development work in this field but it appears probable two or three new wells will be completed by this company within 30 days.

Kern River

George F. Getty, who pioneered development work along the Kern River front, successfully finished two new producers during the past week, both being relatively small. No. 17 Tegeler resulted in a 110-bbl. pumper from 2,502 feet, while No. 21 Lehnhardt started off doing 120 bbls. on the beam from 2,088 feet. Getty also completed No. 22 Lehnhardt and it will be put on the beam within a day or two. No. 20 on the same lease should also be an early completion and this well will be followed into production by No. 23, a recent spud. The Standard finished No. 9 in Section 27-28-27 as a 195-bbl. pumper from 2,155 feet and should have Nos. 10 and 11 on the same property tanking oil within 15 days. Nos. 8, 11 and 12 in Section 15-28-27 should also appear on an early completion list. The General Petroleum is working on No. 15 Young and No. 2 Sill, both of which look good for completion within two weeks. Drilling operations in the Mount Poso Field north of Kern River showed practically no change, although the Shell has started rig construction for No. 2 Glide, a new well. Operations in the Round Mountain Field, on the other hand, increased slightly due to the spudding in of new wells by the St. Helens Petroleum in Section 13-28-28 and the L. & B. Producing Co. in Section 19-28-29. The Elbe Oil Co. should also spud in another new well soon as rotary equipment is being rigged up in No. 7.

Goleta

The Miley Exploration Co.'s No. 1-A Tecolote, finished in the Goleta Field last week, has not yet shown any signs of settling and it will probably be 10 days before the initial production shows any appreciable change. The Miley interests have two drilling projects under way on this lease, No. 8 down 1,200 feet and No. 9 at 505 feet. No. 1 Tecolote, the Goleta Field's deep test, was reported down 4,650 feet several days ago. The Santa Barbara Oil Co.'s No. 2-A Hollister, a recent completion doing 560 bbls. initially from 1,590 feet, has shown a very substantial decline since completion. Present production is running between 100 and 110 bbls. daily. One of the most interesting developments in this area was the preparations being made by the Barnsdall Oil Co. to make a production test of its No. 1 Edwards in the extreme western part of the field. This lease, which is a little less than 3 miles west of the discovery well, has penetrated an oil sand which gives evidence of resulting in commercial production and the production test to be made soon will be watched with interest. It has not been definitely determined, but it appears probable the sand found by the Barnsdall in No. 1 Edwards at 2,200 feet corresponds with the shallow sand logged on the Miley Exploration Co.'s Tecolote property. Clarence Berry, who is drilling about 2 miles east of the discovery well, also reports favorable indications which may result in an early test.

Northern California Wildcats

The Pacific Eastern Production Co. killed its Union Avenue wildcat at Bakersfield in Kern County a day or two ago and the hole will be deepened to open up any additional oil sand which might be present. This well, which came in flowing approximately 8,000,000 feet of gas daily, was only 15 feet into the sand when it blew in prematurely. The actions of this well have every one guessing and the additional work now being undertaken will go a long way toward solving the problem. Some are inclined to believe the Pacific Eastern has encountered two separate zones in this wildcat, one an oil member and the other a gas sand. This opinion seems plausible as the gas produced is dry and shows a methane content of approximately 99 per cent. This would tend to indicate that the oil zone is overlaid by a gas zone, the pressure of which is holding back any oil production which might be available under more favorable conditions. Tubing in the Pacific Eastern's test is about 500 feet off bottom and some are of the opinion that if the tubing was lowered the company might possibly have a natural gas lift. The Pacific Eastern is killing the flow of gas and re-entering the hole will core ahead and ascertain the thickness of the sand which was still present in the hole when the well prematurely blew in two weeks ago. During this exploration work two 2,000-bbl. steel tanks will be erected by the Pacific Eastern to be in a position to turn the well loose immediately upon completion. Considerable work is scheduled to get under way in this area within a short time after the first commercial producer has been finished and supply companies are anticipating a demand of from 25 to 50 installations within 90 days. This, of course depends upon the outcome of the Pacific Eastern's test.

Casa Loma Field

More than 20,000 acres adjacent to Bakersfield on the south have recently been marked as potential oil land with the possibility of producing millions of dollars worth of oil and gas. The vast area of tentatively proven territory by virtue of the Pacific Eastern Production Co.'s wildcat well in the Casa Loma, lies within the bounds of a rectangular field, 7 miles long and 4½ miles wide. Already, with news of the oil strike less than a few weeks old, Bakersfield is the mecca of scores of oil scouts, geologists and oil company officials. Almost 9,000 acres of the best potential land is held under lease by major oil companies, private individuals and independent operators. Unlike other fields in this section, including Mount Poso, Round Mountain and Kern River, work at Casa Loma has resulted in oil leases covering residential lots even within the city limits of Bakersfield, made up of hundreds of small holdings, held by operators under individual contracts in many cases. When drilling begins, it will begin all at once, for oil companies, with holdings intermingled, will be forced to protect their interests with offsets. Many of the leases, according to authentic reports, require drilling or surrender of agreements within a short time. Oil companies interested in the territory, in addition to the Pacific Eastern, which leased thousands of acres before it started drilling on Section 6, are the Shell, Standard, Universal, Union, California Petroleum, Barnsdall, General Petroleum, Associated, Bolsa Chica and Chanslor-Canfield Midway. Oil lease maps show the Shell and Standard as the most westerly holding companies. On the western boundary of the leased properties, Standard holds 80 acres in Section 11-30-27, owned by Anna M. Clark, and farther to the south and west in Section 22-30-27, the Shell has a lease on 240 acres of Miller & Lux land. The most southerly lease on the map is held by Robert Newcomb, who has a 40-acre holding in Section 19, owned by Mary Silva. Standard again marks the eastern boundary, with its 480-acre lease on the city sewer farm in Section 10-30-28, and a 160-acre lease covering the southwest quarter of Section 10, owned by George Hay. The outlying territory included within the potential area, but not yet leased, is owned largely by the Kern County Land Co. Within the southern limits of Bakersfield, the Pacific Eastern holds almost the entire south half of Section 31-29-28, made up of small residential lots, and partly leased in community groups. Pacific Eastern, which began leasing months ago, is the biggest holder of property. It is estimated that its holdings total approximately 3,000 acres. Standard Oil has about 1,200 acres, much of it in half and quarter section parcels, together with several smaller ones. Shell has more than 600 acres and the remainder of the companies are about even, with the exception of Associated, which, according to latest information, was late on the scene of activities.

The Chanslor-Canfield Midway Oil Co. is scheduled to make an early production test of its No. 1-B Hobson, a rather promising looking wildcat in the Seacliff area approximately 6 miles west of Ventura, and the outlook is exceptionally bright for the opening up of a new field at this point. The Rincon Investment Co. recently purchased the 575-acre Dunshee ranch and subsequently leased 100 acres of it to the Associated Oil Co. for immediate development. The lessor will begin moving in equipment for its test within 10 days and drilling will get under way shortly. The Rincon Investment Co., simultaneous with the leasing of the 100-acre tract to the Associated, applied to the Surveyor General of the State of California for a permit to drill on the tidewater lands fronting on the Dunshee property. The acreage leased by the Associated incidentally appears to be exceptionally well located and should get in on the play if the Chanslor-Canfield Midway Oil Co. opens up a new field with its No. 1-B Hobson as anticipated.

Southern California Wildcats

The Associated Oil Co. suspended operations on No. 1 Johnson, a 5,507-foot wildcat at Potrero, but started preparations almost simultaneously for an early test of No. 1 Cypress, the original wildcat in this area which is situated midway between the Rosecrans and Inglewood Fields. The latter, by the way, has been standing cemented in an untested oil sand since last November and although several dry holes have been drilled subsequently the test to be concluded by the Associated will be watched very closely. Two new wildcats were located in southern California during the past 10 days, both fairly well located. One of these new wildcats will be drilled by the Western Oil & Refining Co. in Section 29-3-14. This location is about a mile away from the Winwell Oil Co.'s old wildcat abandoned at 5,585 feet and a similar distance removed from the Manhattan Pacific's No. 1 Hermosa, abandoned at 4,350 feet. The San Clemente Oil Co. two weeks ago spudded in its initial test but a short distance away. Preparations are also being made to wildcat the area in and around Monterey Park and, while two dusters have already been chalked up against that district, none of those drilled have been deep enough to prove conclusive tests. The General Petroleum's No. 1 Garvey, the last and deepest of the wildcats drilled in this district, was abandoned at 3,650 feet.

IRMA-WAINWRIGHT HAS BIG GASSER; TURNER VALLEY PROVEN AREA GROWS

By Victor Lauriston
Staff Correspondent, Canadian Fields

CHATHAM, Ontario, Aug. 6.—The Irma-Wainwright Field in east central Alberta came to the front this week when National Exploration Co.'s No. 1, LSD 1, Section 30-45-6w4, developed a big gasser. This test got the top of the sand at 2,237 feet, when casing was cemented and the well later drilled in. At 2,269 feet the well started with an estimated flow of 5,000,000 feet. This latter increased to 14,000,000 feet, the latter measurement being made by W. Calder, Government petroleum engineer, of Calgary. Though the flow later showed some signs of diminution, the well is the largest gasser yet drilled in the Irma-Wainwright Field. Efforts are being made to get the flow under control, and it is reported that with the gas partially under control the well is commencing to show some oil. A bailing test of the oil production will be made.

In the same field, British-Wainwright's No. 1, LSD 4, Section 22-45-6w4, is reported at 2,230 feet and drilling close to the top of the sand. When the sand is reached casing will be cemented and the well drilled in. Interior Oil Co., Section 36-44-7w4, shut down since the spring, has resumed drilling around 1,900 feet. Before the shutdown a strong gas flow was encountered and some difficulty was experienced getting this under control. The test is close to Wainwright and on a different local structure from most of the Irma-Wainwright producers.

On the Ribstone-Blackfoot structure, east of the Irma-Wainwright Field, London-Ribstone's No. 1, LSD 14, Section 10-43-3w4, is shut down waiting for 12½-inh casing to shut off the surface water. Dave Credille, who recently underwent an operation in Edmonton Hospital, has resumed charge of the drilling. Ribstone Oils' No. 1, LSD 1, Section 1-46-1w4, which was cemented at 1,840 feet to shut off 1,200 feet of water, has resumed drilling.

Turner Valley Field Extended

In the Turner Valley Field southwest of Calgary, Calmont Oils, LSD 2, Section 1-20-3w5, has struck a considerable flow of light crude in the lower Dakota horizon at 3,978 feet. At 3,825 feet the drill entered a very hard brown sand, the formation having changed three times in 25 feet of drilling. On drilling deeper the well encountered a strong show of oil at 3,978 feet. It has not been drilled into the sand to any extent. The present estimated output is 20 to 25 bbls. a day, and the oil is a heavy high-grade crude of 35 gravity. A 150-bbl. tank has been secured from the Canada Southern Oil & Refining Co. and a bailing test is being made.

Calmont No. 1 is a considerable distance down the west side of the structure, and strike here materially extends the proven area of the Turner Valley Field on the west side of the anticlinal axis. The present oil showing corresponds apparently to the first Dakota showing in other wells, and deeper drilling is likely to secure larger production from the lower Dakota horizons. With regard to the strike, T. B. Williams, M. Sc., Ph. D., geologist for the Calmont and associate companies, gave out the following statement:

"The striking by the Calmont well at this time of its first pay sand at the top of the Blairmore (Dakota) formation is a very important thing, not only for the company but for all those who are interested in the development of the Turner Valley. A producing well at this point materially increases the proven width of the field.

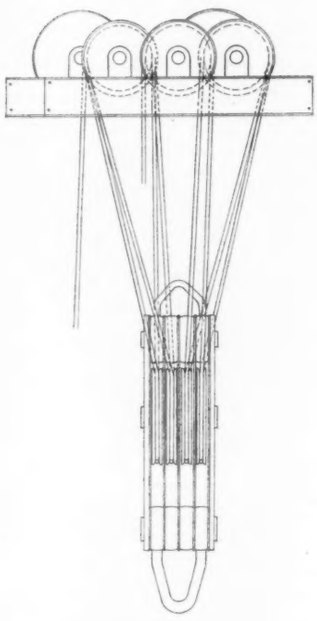
"Not long ago it appeared to be the prevailing opinion that Turner Valley had been formed by erosion in the top of an anticlinal structure. This structure was supposed to contain a small syncline on its top. Structurally such things do not happen, in as much as the upper measures of an anticline are in tension which, while it might produce a fault could not produce a syncline, which is an evidence of suppression.

"Much more information is now available concerning Turner Valley and we now know that the structure consists of a series of anticlinal folds, overturned from the west toward the east. A certain amount of longitudinal faulting has taken place and that which was previously considered an anticlinal axis should be regarded as a faulted syncline between two of the major folds of the main structure.

"On the west of this fault line two minor anticlinal folds exist on the flank of a larger one. On the more westerly of these minor structures the Calmont well is situated. The Benton shales had at this point undergone so much drag folding that it has been impossible to calculate the depth at which the oil sand

(Continued on Page 116)

Feature No. 1



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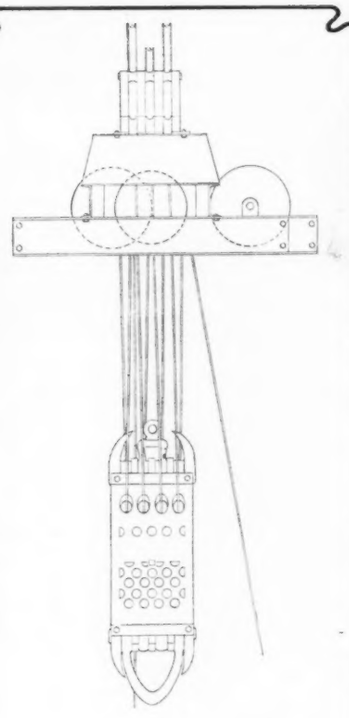

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Indiana Wells Best in the Central West

Six Producers With Aggregate of 455 Bbls. Central West Reported 33 Completions Making 702 Bbls. Initial

By Whit
Staff Correspondent, Central West Fields

FINDLAY, Ohio, Aug. 8.—Indiana made the best showing for the week of any of the four divisions comprising the Central West Field, owing to the finding of better producers, as six new wells in the Hoosier State showed an initial of 455 bbls. The week's record in the Central West shows 33 completions, 12 producing wells with an initial production of 702 bbls., 8 dry holes and 13 gas wells, with Central Ohio leading with 18 completions, 2 producers with an initial of 110 bbls., 4 dry holes and 12 gas wells, the others being distributed among the Lima Field, Indiana and Illinois.

Center Township, Gibson County, in the southwestern part of Indiana, sprang a surprise when three wells came in above the century mark. No. 2 on the L. Jenkins farm, Section 13, showed 200 bbls.; No. 2 on the David Hutchinson farm, same section, 125 bbls.; and No. 4 on the Margaret D. Hollingsworth farm same section, 125 bbls., all being natural producers without the use of a shot. An 80-bbl. pumper was struck in No. 2 on the Asa A. Gher farm, in the Allendale Field of Wabash Township, Wabash County, Illinois, while a test in Cumberland County, near Casey, produced an initial of only 2 bbls. on the Roberts farm. In the Lima end of the field, a 45-bbl. well was drilled on the Kuckerman farm, in Washington Township, Auglaize County, an above-the-average producer for the field. The gas companies are doing additional drilling at this time throughout the Central Ohio gas belt in the hunt for a new supply of fuel.

Lima Field

Only two oil producers were found during the week's report from the old Lima Field of northwestern Ohio, while one gas well and one dry hole were found, the four wells being widely separated. The best completion was made by the Brookside Oil & Gas Co. in No. 5 well, 850 feet from the north line and 230 feet from the east line of the F. H. W. Kuckerman farm, in the southeast quarter of Section 29, Washington Township, Auglaize County. Sand was topped at 1,187 feet and at 40 feet in the sand showed an initial of 24 hours' production of 45 bbls. W. E. Cook and others are drilling a test on the F. Wiseville farm, Section 9, same township, while in Logan Township, same county, W. Sprague and others are drilling No. 1 on the H. C. Whetstone farm, Section 27. Noble Township, is credited with one drilling well, being George S. Lacknett and others' second attempt on the J. Mallery farm.

In Jackson Township, Sandusky County, Frank Haubert and others' No. 2 well, 1,150 feet from the north line and 200 feet from the west line of the Fannie Havens farm, in the southeast quarter of Section 17, pumped 10 bbls.

Development work has practically been given up around Danbury in Danbury Township, Ottawa County, and in the Catawba Island area. The Ohio Oil Co.'s test on the Fred Block farm, Section 4, Danbury Township, has been given up as a failure.

In the Payne gas field of Paulding County, F. Thomas Kneer and others have drilled in a nice gas well in a test on the J. M. Henry farm, Section 17, Benton Township, Paulding County. Associated with Mr. Kneer in this development are H. H. Lockwood and Y. V. Simms from Wisconsin, Birchwood and Ladysmith, respectively, officers of the United States Oil & Gas Co. These people are planning to drill a test on leases recently secured in Paulding Township, same county, about 3 miles west of the town of Paulding, in quest of oil.

Indiana

Some little excitement prevails in southwestern Indiana over the bringing in of three nice oil wells in territory where it was least expected. All three are in Center Township, Gibson County. The best of the trio is Joe S. Young, Jr., and others' No. 2 well, 660 feet from the south line and 200 feet from the east line of the L. Jenkins farm, in the northeast quarter of Section 13, where the sand was topped at 1,393 feet and sent 20 feet in the sand, the initial production amounting to 200 bbls. Same firm's fourth well, 225 feet from the north line and 1,820 feet from the west line of the Margaret D. Hollingsworth farm, same section, had an initial production of 125 bbls. Sand was struck at 1,416 feet and drilled 14 feet in the sand. In the same section, Mann & Huber's second test, 550 feet from the north line and 225 feet from the west line of the David Hutchison farm, found sand at 1,403 feet and went 13 feet in the sand, the initial production amounting to 125 bbls. Gray and others are drilling No. 6 on the John Wirtz farm, Section 30, same township. Joe S. Young and others are starting No. 3 L. Jenkins, Section 13, and No. 5 on the Margaret D. Hollingsworth farm, while Mann & Huber are starting No. 3 Dave Hutchison farm. In Washington Township, same county, H. C. Darby and others are drilling No. 1 George Henring farm, Section 33, while in Barton Township the Gem Oil Corp. is drilling No. 4 on the H. E. Raiborn farm, Section 8.

In Pike County, Madison Township, Bell Brothers' test, 660 feet from the north line and 200 feet from the east line of the Warner Ropp farm, in the northeast quarter of Section 2, was a dry hole at 1,180 feet. The Ohio Oil Co. is drilling No. 6 on the N. B. Coffman farm, Section 26. In Washington Township, L. G. Gee and others are starting a test on the Rover-May land. In Clay Township, A. B. Bement has abandoned No. 2 on the Eldon Catt farm, Lot 13, while the United Petroleum Co. pulled out No. 2 on the N. W. Shafer farm, Section 27, Logan Township, same county.

In Veale Township, Daviess County, the Home Oil Co.'s second well, 800 feet from the north line and 150 feet from the west line of the National City Bank Co.'s land, in the southeast quarter of Section 16, tapped the sand at 1,085 feet and went 8 feet in the sand, getting a 5-bbl. initial producer. Cavinal and others' No. 3 well, 800 feet from the north line and 750 feet from the east line of the J. C. Allison farm, in the northwest quarter of Section 35, came in a rank duster at a total depth of 1,400 feet. Hartman, Sargent and others are working at No. 2 on the L. I. Veale farm, Section 21. Peak Oil Co. is drilling No. 3 T. Ragsdale heirs farm, same section, and L. G. Gee and others are working at No. 1 on the Delbert Barbee farm, Section 28.

The Siosi Oil Corp. is drilling a second test on the William Riggs farm, Section 31, Prairie Creek Township, Vigo County, between Terre Haute and Sullivan, where No. 1 recently brought in showed an initial of 125 bbls.

No completions were reported from the old Trenton Rock area of Indiana, there being few wells under way in the eastern portion of the State.

Illinois

The Cumberland Oil Co. drilled a test 500 feet from the north line and 200 feet from the east line of the L. Roberts farm in the southwest quarter of Section 11, Union Township, Cumberland County, northwest of Casey, and went to a total depth of 680 feet, then plugged back to a pay sand at 540 feet and put the well on the beam, the initial production being but 2 bbls. E. A. Ruedy and others' test, 1,000 feet from the north line and 840 feet from the east line of the E. Robey farm, in the southeast quarter of Section 16, same township, was a dry hole at 690 feet.

In the Allendale Field, in Wabash Township, Wabash County, H. R. Martin and others' second test, 200 feet from the south line and 600 feet from the west line of the Asa A. Gher farm, in the southeast quarter of Section 6, pumped 80 bbls. initial, the sand being topped at 1,322 feet and sent 34 feet in the sand. Keneipp and others' test, 600 feet from the south line and 150 feet from the west line of the Fanny Buchannan farm, in the southwest quarter of Section 15, was a duster at 1,630 feet. Mayhugh and others found one of the same kind in No. 14 well, 600 feet from the south line and 200 feet from the west line of the Kogan heirs farm, in the southwest quarter of Section 2, at 1,585 feet. C. E. Bothwell is making a deep test at No. 4 on the Jesse Cisil farm, Section 2, and a showing was found at a total depth of 2,206 feet, or 14 feet in the sand.

In Lawrence Township, Lawrence County, the Ohio Oil Co. abandoned No. 2 on the Lawrence County Infirmary farm, Section 4, and in Bridgeport Township, the International and Emerald Oil Co.'s Nos. 12 and 18 C. H. Fyffe No. 2 farm, Section 31, were abandoned.

Joe S. Young, Jr., and others are drilling a test on the F. S. Wilkinson farm, Section 18, Friendsville Township, Wabash County.

Central Ohio

Development work is holding its own in the Central Ohio gas field, the gas companies hunting for an additional supply of fuel for the coming winter months and while the wells are not of the gusher stripe, they average up well. Large gas wells are a scarcity at this time and more wells show less than 1,000,000 feet initial than above that, for a well of that volume nowadays is considered a good find. Ashland County has the greatest revival of any of the old gas producing counties, although Guernsey and other new counties that have been brought in line of late have shown large volume, especially Guernsey, where big wells were uncovered in the Niagara limestone formation. The Berea sand must also come in for its gas volume.

The gas well on the Braniger farm, in Monroe Township, Guernsey County, near the little town of Birmingham, about 15 miles northeast of Cambridge, drilled by Anson Henry Russell, of Cleveland, Ohio, is reported increasing in volume and pressure, now registering over 500 pounds and slightly over 3,000,000 feet of gas. The gas in the Braniger well was found in the lower Berea sand about 50 feet under the old Berea from which the Gombert Oil & Gas Co. has been producing gas from 9 or 10 wells for the past five or six years, the production being taken by the Ohio Fuel Co. Mr. Russell has a total of 1,600 acres and plans to deepen all these old wells to the lower sand and in that manner he should open or build up a very large volume of gas. The Ohio Fuel Supply Co. has the contract for the gas from about 800 acres of this 1,600 acres, and the East Ohio Gas Co. has contracted for the gas output from the remainder. The Ohio Fuel Supply Co. has already taken over $100,000 worth of gas from these wells. Russell is now drilling on the Edinburn farm, close to the town of Birmingham and about 2,000 feet north of his gas well on the Braniger farm. The East Ohio Gas Co. is now drilling a well 400 feet from the north line and 400 feet from the east line of the Johnston farm, adjoining the Braniger farm on the west, and should get a good gas producer.

In Knox County, Butler Township, Bell Brothers' test 1,470 feet from the north line and 325 feet from the east line of the Allen Clark 80 acres, Section 20, is a light gas well in the Berea sand at from 949 to 954 feet. In Jefferson Township, same county, the East Ohio

(Continued on Page 100)

SEVEN COMPLETIONS IN SAGINAW; OTHER DISTRICTS TO BE TESTED

By Whit
Staff Correspondent, Michigan Fields

SAGINAW, Mich., Aug. 6.—Seven completions are reported in the Saginaw Field since the last report, none of them being above the general average producers found in the field. There is no letup in new work as every string of tools is busy, although some of the drilling outfits have moved outside the older portion of the field to points in Saginaw County as well as in Shiawassee and Gratiot Counties to the south and southwest.

The well that attracts much attention at this time is the Sun Oil Co.'s wildcat on the McGuineas farm, 4 miles northwest of Owosso, in Shiawassee County, about 40 miles southwest of Saginaw. This well got its pay in what is supposed to be the Saginaw sand, and when put on the pump was reported doing 9 bbls. per day, but is now reported to be improving, with a daily average the past week of from 15 to 18 bbls. If this well keeps up its production for a few weeks active development can be expected in that vicinity. Vorhees & Sovereign are drilling a well near the McGuineas farm, on the Patrick Wade farm, and the Sun Oil Co. is drilling a wildcat 13 miles southwest of the McGuineas well, on the Gallagher-Scully lands in Antrim Township, Shiawasee County, and its outcome will be watched with much interest. The Fordney Petroleum Co. is planning a test to be drilled about 1½ miles northwest of the McGuineas producing well.

Three wildcat wells are drilling near the town of Ashley, in Gratiot County, and northwest of the Shiawassee County production. Thousands of acres have been taken under lease in Shiawassee, Gratiot, Genesee Counties and in all parts of Saginaw and Bay Counties. As yet the scouts have not been attracted to territory east of Saginaw, where prospects are just as flattering for an oil field as in any spot in any other direction from the Saginaw production. Production has been found near Port Huron, in St. Clair County, and any county in the point running out between Saginaw Bay and Lake Huron thought to look just as inviting as any area known in the state. In this arm that reaches out between the lake and bay are Tuscola, Huron, Sanilac, Lapeer and St. Clair, with fair prospects in Macomb County, in the vicinity of Mount Clemens. Considerable leasing has been done in this big strip of terri-

(Continued on Page 110)

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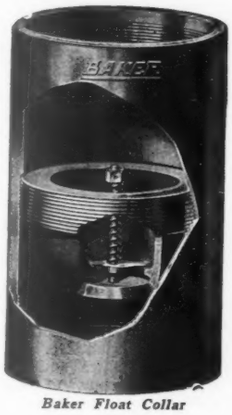

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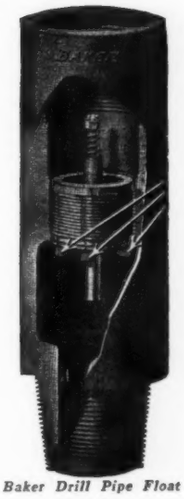

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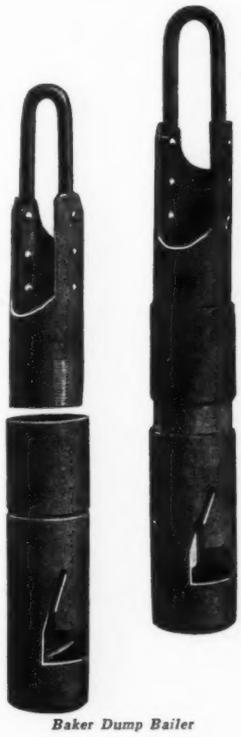

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Guernsey and Holmes Counties Drop

Henry District, Clay County, West Virginia, Nearing Boundary of Productive Area With Smaller Completions

By D. S. Wakenight
Staff Correspondent, Eastern Fields

PITTSBURGH, Pa., Aug. 8.—Operations for the month of July were discouraging. The volume of new production brought to the surface was smaller than for any previous month in the history of developments in the eastern fields. During the closing week of the month but one fair producer was completed. It is located in the deep sand territory in southeast Ohio. In Lot 24, Hardy Township, Holmes County, the East Ohio Gas Co. got a producer that placed 90 bbls. to its credit the first 24 hours after shot in the Clinton sand. It is located on the David R. Anderson farm.

Coshocton County

In the southwest quarter of Section 10, Monroe Township, Coshocton County, the Empire Gas & Fuel Co. completed in the Clinton sand a test on the C. H. Parks farm. It is a gasser good for 2,000,000 feet and showing a little oil. Near the county line, in Section 1, Monroe Township, Coshocton County, the East Ohio Gas Co.'s second test on the H. J. Nyhart farm is a Clinton sand gasser good for 3,000,000 feet.

Sterling C. Brown has completed his test on the W. P. Jones farm, in the northwest quarter of Section 20, Jackson Township, Knox County. It is a 5-bbl. pumper in the Berea grit. In Section 1, Jefferson Township, Knox County, the Upham Gas Co. has completed its tests on the George Swingle and Frank Logsdon farms. Both are dusters. The East Ohio Gas Co. got another at a test on the Charles Sheldon farm. In Section 24, Jefferson Township, Noble County, Homer Cain & Co. are due in the sand at a test on the Alexander Swiger farm. In the same township, Joseph Saling and others have a rig up for a test on the Feldnar farm.

In Section 2, Monroe Township, Coshocton County, the Ohio Fuel Gas Co. has completed and shot in the Clinton sand a test on the Samuel Miller farm. The well produced 25 bbls. the first 24 hours. It will be good for 6 or 8 bbls. a day.

Athens County

In the Fisher Pool, in Lot 74, Athens Township, Athens County, Gross & Fenault have completed in the Berea grit No. 4 on the B. Irwin farm and is a gasser good for 2,000,000 feet. In Section 24, Alexander Township, the Townsend Oil & Gas Co.'s No. 10, on the Elizabeth Smoot farm, is a 5-bbl. pumper in the same formation.

In Lot 23, Mary Ann Township, Licking County, McClay Brothers and others have completed in the Berea grit a test on the William Stricker farm. It is also showing a little oil and is 1 mile south of the Ohio Fuel Supply Co.'s test on the T. F. Livingston farm.

In Lot 288, Sutton Township, Meigs County, the Pennsylvania Bera Grit Co. drilled No. 4 on the Hannah M. Capehart farm into the first Cow Run sand and got a gasser good for 1,500,000 feet. In the southeast quarter of Section 36, Reading Township, Perry County, E. W. English completed in the Clinton sand a test on the E. Wendall farm. It is a light gasser good for 350,000 feet. In Lot 5, Section 14, Chatham Township, Medina County, E. R. Edson Son & Co. completed No. 22 on the William P. Wortz farm. It is a very light pumper at a total depth of 385 feet.

Licking County

In Section 15, Franklin Township, Licking County, A. J. Weidman & Co. have a 5-bbl. pumper in the Berea grit at No. 6 on the R. L. Tavener farm. The Ohio Fuel Supply Co. is drilling a test on the Austin Orr farm, and W. W. and A. T. Wehrle are drilling on the Mearl Dodson farm. In Hanover Township, the Hope Construction & Refining Co. has rigs up for tests on the E. H. Evans and J. E. Shaw farms. In the same township, the same company's test on the J. C. Morrison farm is a gasser in the Clinton sand.

In Section 13, Washington Township, Hocking County, the Gordon Oil Co.'s No. 3, on the W. H. Stone farm, is a light gasser. In Section 17, Green Township, Bell, Scholl & Co. have a duster at a test on the P. Lehman farm. In the same township, the Ohio Fuel Supply Co. has the same luck at a test on the Ohio State lands. In Section 11, West, Snyder & Co. have the rig completed for a test on the G. H. Guess farm.

In Monroe Township, Coshocton County, the Ohio Fuel Gas Co.'s test on the Samuel Miller farm, is a gasser in the Clinton sand. The Logan Gas Co. and the Ohio Oil Co. have rigs up for tests on the Oliver Borden and John Kasner farms.

In Bethel Township, Section 28, Monroe County, Gartlan & Stewart have a very light pumper in the Keener sand at No. 7 on the James Kinsey farm. In Section 13, Washington Township, George E. Weckenbacher and others have completed in the Squaw sand a second test on the B. F. Rose farm. It is also a very light pumper. In Section 24, same township, the Gold Crown Oil & Gas Co. is due in the sand at a second test on the Loretta Pryos farm.

Perry County

Operations in Reading Township, Perry County, show a little increase. In Section 19, the Hope Construction & Refining Co.'s test on the Edward Petty farm is good for 15 bbls. a day in the Clinton sand. In Section 13, the Wiser Oil Co.'s test on the Samuel Hover farm is a duster in the same formation. In the same section, the Ohio Fuel Supply Co. is due in the sand at a test on the D. G. Love farm. In Section 19, Dean Egart and others are drilling a test on the George Adman farm. In Section 19, the Hope Construction & Refining Co. has started to drill on the Cyrus Barnes farm. In Section 24, Henderson & Co. are due in the sand on the R. W. Henderson farm.

Hocking County

In Section 5, Starr Township, Hocking County, the Chartiers Oil Co.'s No. 5, on the Robert Wolf farm, is a very light pumper. In Section 4, same township, the Preston Oil Co.'s test, on the W. S. Wallett farm, is not good for more than 2 bbls. a day. In Section 34, the Griffin Producing Co. has a gasser at a test on the Robert Tucker farm. In Section 24, the Logan Gas Co. has a gasser on the Almeda Linton farm.

In the deep sand territory in southeast Ohio, in the southwest quarter of Section 18, Green Township, Hocking County, the Pure Oil Co. completed and shot in the Clinton sand No. 5 on the L. A. Leslie farm. It produced 30 bbls. the first 24 hours.

In the southeast quarter of Section 20, Harrison Township, Perry County, the Pure Oil Co.'s test, on the Tague heirs' farm, is a duster in the Clinton sand at a depth of 3,620 feet. In the southwest quarter of Section 36, Jefferson Township, Noble County, Joseph Estadt & Co. had the same luck at No. 6 on the D. W. Williams farm. In the northwest quarter of Lot 290, Sutton Township, Meigs County, the Sumner Oil & Gas Co. has started to drill another test on the William D. Boush farm.

Active Fields Decline

For some months Guernsey and Holmes Counties in Southeast Ohio have been most active, but now show a rapid decline. Many locations in Guernsey County have been abandoned and will not be drilled at present. In Liberty, Wheeling and Adams Townships, the Ohio Fuel Supply Co. has abandoned locations for tests on A. C. Kennedy, W. S. Owens, Samuel Rick and Thomas Mitchell farms. The same company has abandoned its locations Frank Kelly, J. W. Shriver, W. B. Hall and Toney Popeum farms.

The Ohio Fuel Gas Co. is drilling tests on the Samuel Armstrong, E. A. Tompkins, T. L. Johnston and George Sherman farms. In Section 13, Westland Township, Davis Brothers & Co. are drilling a test on the Robert H. Wortman farm. In the same township, the same parties are drilling Nos. 4 and 5 on the R. L. Rudy farm. In Union Township, McCurdy & Co. are drilling tests on the F. H. Gardner and A. H. Given farms.

Holmes County has but 10 wells drilling. In Hardy Township, the East Ohio Gas Co. is due in the sand. At No. 5 on the D. R. Anderson, Etta J. Nowells, Harriett McCullough, J. R. Hastings and Harvey Bell farms. In Section 11, Monroe Township, the Ohio Oil Co. is due in the sand on the Olive Smitheiser farm. In Section 19, the Empire Fuel Gas Co. is drilling a test on the F. A. Kinsey farm.

West Virginia

Light pumpers and gassers were the offering in West Virginia. The new production derived from the West Virginia fields during the month is smaller than at any time in the past.

In Sheridan district, Calhoun County, the Great Elk Oil Co. has completed in the salt sand No. 27 on the Samuel Bachman farm and good for 2 bbls. a day. In Grant district, Cabell County, the Harshbarger Oil & Gas Co.'s test on the A. R. Conner farm is a gasser in the Berea grit.

In New Milton district, Doddridge County, J. E. Trainer's No. 6 on the Lewis Maxwell farm is a light gasser in the Big Injun sand. In the same district, the Manufacturers Light & Heat Co. is drilling at 3,700 feet on the Henry Ahouse farm.

In Clay district, Ritchie County, C. E. Ross & Co.'s test on the M. M. Cochran farm is a duster. In Union district, Ritchie County, the Hope Natural Gas Co.'s second test on the T. A. Mason farm is a duster in the Big Injun sand. In Murphy district, E. E. Pope has a light gasser at his No. 8 on the M. S. Gambrill farm. In the same district, Edward Wilson and others have drilled to a depth of 1,600 feet at a test on the McCosh heirs' farm and shut down.

On the waters of the Kanawha River, Scott district, Putnam County, 2 miles north of Seary post office, McCorkle & McClinter have completed a test on their own farm and have a fair gasser in the Berea grit. On Charley Creek, Grant district, Cabell County, the Harshbarger Oil & Gas Co. has completed and shot in the same formation a second test on the Albert Conner farm. It is a gasser and the location is 1,300 feet northwest of the first test. On Wild Creek, Barboursville district, 2 miles north of Barboursville, Shipe & Co. have the rig completed and started to drill a test on the A. G. Plybon farm. On Two Mile Creek, the Big Two Mile Creek Gas Co. has started

(Continued on Page 98)

MORE THAN AVERAGE PRODUCERS IN KENTUCKY-TENNESSEE FIELDS

By Whit
Staff Correspondent, Kentucky-Tennessee

OWENSBORO, Ky., Aug. 6.—The weeks's report of Kentucky-Tennessee fields is more interesting than many of the previous ones, owing to the bringing in of a number of more-than-average producers, in Ohio, Davies and Warren Counties of Kentucky, and in Jackson County, Tennessee. The Sunnydale area of Ohio County is not showing the good wells that the Ambrose Pool and its extension bring forth. Production is climbing in the Tri-County Field on account of the good wells.

Ohio County reports five completions in the Ambrose Pool that are century or better producers which is saying a good deal for Kentucky, but this rich pool has attracted wide attention and is destined to be pretty thoroughly drilled over by the close of the present season and other pools of the same caliber are being sought for by the trade. Warren County also comes forward with a shallow hole that produced 60 bbls. naturally the first 24 hours, the largest well found in the county in some time. In the Ambrose Pool, in Ohio County, the best of late wells is No. 8 on the Sally 8 on the Ellis-Heflin farm, in the same 8 on the Ellis-Heflin farm,in the same pool, that showed 143 bbls., naturally, is said to be a 250-bbl. producer. No. 9 Rodney Taylor farm, is an initial producer of 150 bbls.; No. 1 Gray farm, 150 bbls.; No. 24 Weller farm, 100 bbls.; No. 11 Mary Elmore farm, 200 bbls.; and No. 2 Roby farm, in Daviess County, 40 bbls. initially. In the eastern part of the State, the wells are all small producers, while in Jackson County, Tennessee, two completions on the Hawkins farm are reported at 50 and 100 bbls. respectively. This new pool on Lock Branch has developed some wonderful shallow producing wells during the past several months and that part of Tennessee, taking in Jackson, Macon, Clay, Pickett, Overton and other counties to the south is in for a heavy play during the next few months.

Week's Work

A summary of the week's work in the Kentucky-Tennessee fields show 32 completions, 22 producers with an initial production of 1,268 bbls., 10 dry holes and no gas wells. Compared with the previous week there were 9 more completions, 8 more producers, 735 bbls. more production, 3 more dry holes and 2 less gas wells. The wells were distributed by counties and districts as follows:

County—	Comp.	Oil Wells	Prod.	Dry	Gas
Ohio	15	10	995	5	0
Estill	6	4	8	2	0
Johnson-Magoffin	2	2	9	0	0
Wayne	2	1	3	1	0
Warren	1	1	60	0	0
Daviess	1	1	40	0	0
Powell	1	1	3	0	0
Elliott	1	0	0	1	0
McCreary	1	0	0	1	0
Kentucky	30	20	1,118	10	0
Tennessee, Clay Co.	2	2	150	0	0
Total	32	22	1,268	10	0
Last week	23	14	533	7	2
Difference	9	8	735	3	2

Tennessee

Two more-than-average producers were found in the Lock Branch area of Jack-

(Continued on Page 71)

giving universal satisfaction

Traditional with Axelson

Ceaseless progress is reflected in the manufacture and performance of Axelson Pumps and Sucker Rods* . . . . always delivering greater service . . . . infinitely greater than the average . . . . by reason of constant, diligent research, uniformity of quality, perfection in design and Axelson resources.

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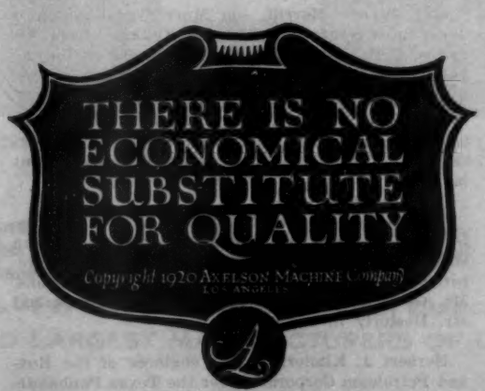

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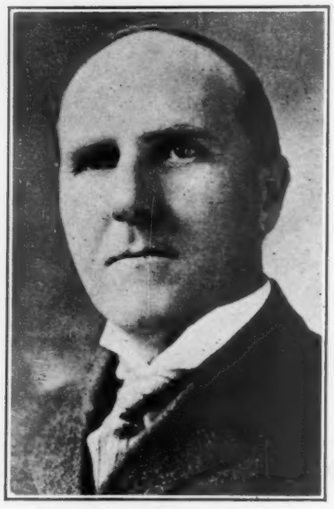

C. E. Van Orstrand

C. E. Van Orstrand, geophysicist of the United States Geological Survey, has the distinction of being a pioneer in research work relating to the practical prob'em of measuring temperatures in deep wells for which special apparatus has been developed. In the infancy of this new research of science it became necessary to invent various devices for lowering thermometers into deep wells and for measuring the depths at which temperatures are taken. As simple as this general statement may sound, this work of investigation has involved many refinements in order to achieve the high degree of perfection that has been reached.

Mr. Van Orstrand is a native of Pekin, Ill.

The first collegiate work of Mr. Van Orstrand was at the University of Illinois from which he was graduated in 1896. In the following year he completed a course in mathematics and astronomy, which studies he continued in the postgraduate school at the University of Michigan, and in June, 1898, he received the masters degree from that institution.

In August of the same year, he received an appointment as computer in the Nautical Almanac Office of the United States Naval Observatory at Washington, D. C. In July, 1900, he was promoted to the position of assistant in that office and one year later this position was resigned to accept an appointment as assistant physical geologist in the Physical Laboratory of the United States Geological Survey.

Promoted through the various grades he now occupies the position of geophysicist in charge of the physical laboratory.

For the past 15 years Mr. Van Orstrand has given a course in mathematical physics in the postgraduate school in George Washington University, Washington, D. C. His membership in scientific societies includes among many others the American Mathematical Society, the American Physical Society, the Astronomical and Astrophysical Society of America, and the Geological Society of Washington.

PERSONAL PARAGRAPHS

R. A. Ford, vice president and manager of the Amarillo Oil Company, is spending his vacation in Denver, Colo.

* * *

D. B. Myers, assistant chief geologist of the Union Oil Company of California, has returned from a four weeks' trip through Texas and Oklahoma, his presence in that area being necessary in connection with company business.

Scott Heywood, pioneer Panhandle producer, has left with Mrs. Heywood on an extensive trip through the West.

* * *

D. F. Schindler, sales manager of the Southwestern Engineering Company of Los Angeles, Calif., is visiting in Calgary, Alberta.

* * *

E. L. Peck, general manager of the Empire Gasoline Company, has been spending a two weeks' vacation in the Minnesota hills.

* * *

W. F. Clark, of the Delmar Oil Company's land department at San Angelo, Tex., with his wife and daughter, is on vacation in New Mexico.

* * *

M. J. Grogan, vice president of the Louisiana Oil Refining Corporation of Shreveport, La., has been in New York City a week on company business.

* * *

John A. Cram, Panhandle geologist for the Gulf Production Company, has returned to Amarillo, Tex., following an extensive trip into New Mexico.

* * *

H. J. Conley, who is interested in production in the Panhandle fields, is visiting Houston, Tex. Mr. Conley is one of the pioneers in the Gulf Coast region.

* * *

Gene Fitzpatrick, head of the Deep Rock Oil Company, Fort Worth, Tex., has returned to his offices following a several days' trip into the Panhandle.

* * *

A. S. Henley, chief geologist for the Houston Oil Company and allied corporations, is spending several weeks' vacation in the hill country around Kerrville, Tex.

* * *

Commander H. A. Stuart, United States Navy, is in Casper, Wyo., looking after affairs connected with the Teapot Dome, as one of the receivers appointed by the court.

* * *

H. L. Raynor has been appointed manager of the Houston, Tex., office of the Crucible Steel Company, which was recently opened in the new Esperson Building.

* * *

W. R. Capron, vice president of the Sinclair Crude Oil Purchasing Company, with headquarters in Tulsa, Okla., was recently in the Texas Panhandle on an inspection tour.

* * *

F. W. Burford, vice president and general manager of the Crystal Oil Refining Corporation, Shreveport, La., has returned to his office from a week's business trip east.

* * *

John J. Thomas, assistant superintendent of refineries for the Crystal Oil Refining Corporation, Shreveport, La., is taking a two weeks' vacation motoring to Pennsylvania.

* * *

Burton W. Hink, of the Tulsa, Okla., offices of the Standard Oil Company of Indiana, has returned from a business trip to El Dorado, Ark., and Shreveport, La., oil offices.

* * *

Mrs Wynne Merrill, son Murray and daughter Jane, have returned to Petrolia, Ontario, from Negritos, Peru, where Mr. Merrill is working for the International Petroleum Company.

* * *

David Donoghue, head of the land department of the Texas Pacific Coal & Oil Company, has returned to Fort Worth from a month's vacation spent in the mountains of New Mexico.

* * *

T. H. Grobe, assistant treasurer, and J. H. Hesterly, chief scout and land man, for the Louisiana Oil Refining Corporation, Shreveport, La., have returned to their work after two weeks' vacations. Mr. Grobe spent his vacation in West Texas and Mr. Hesterly in Arkansas.

* * *

Herbert J. Kimler, district engineer of the Roxana Petroleum Corporation for the Texas Panhandle district, has been made assistant to the production superintendent, W. L. Simmons. He has been succeeded by Ed Zollar, who was district engineer in the Braman district of northern Oklahoma.

Shep Miers, of Houston, Tex., sales representative for the Dunn Manufacturing Company of Oxnard, Calif., is spending some time in Shreveport, La., working the Pine Island Field.

* * *

L. L. Smith, of the purchasing department of the Louisiana Oil Refining Corporation, Shreveport, La., has resigned that position to accept a place with the Peden Iron & Steel Company.

* * *

G. Leigh-Jones, president of the Shell Company of California, is expected to return to the home office in San Francisco early this month following a trip abroad which also took him to The Hague.

* * *

L. L. Rector, sales manager for the Longhart Supply Company, has moved to Fort Worth, Tex., after a year spent in Amarillo, Tex. Previous to that, Mr. Rector was in Wyoming for a couple of years.

* * *

H. H. (Captain Harry) Johnson, zone agent for the Gulf Production Company in the Eastland, Tex., district, has returned from a two weeks' vacation spent in the National Guard encampment at Mineral Wells, Tex

* * *

C. Otis Winn, chief scout for The Texas Company in Arkansas, Louisiana and East Texas, has returned to his desk after a two weeks' vacation during which time he, with his family, motored to Galveston, Tex.

* * *

L E. Barrows, head of the producing department of The Texas Company in the north central Texas division, is leaving Fort Worth, August 13, for New England where he will join Mrs. Barrows in a vacation trip to Canada.

* * *

M. A. Bangs, of the P. J. Sonner Gas Burner Company, of Winfield, Kans., is visiting the trade in California. P. J. Sonner, president of the company, has returned from a several months' trip to the Rocky Mountain area.

* * *

F. E. Wilkerson, manager of agency sales for the Louisiana Oil Refining Corporation, Shreveport, La., is in the sanitarium recovering from injuries suffered when an automobile in which he was riding turned over and was wrecked.

* * *

Sidney Powers, of Tulsa, chief geologist for the Amerada Petroleum Corporation, recently made a trip through Pecos, Terrell, Val Verde and adjacent counties of West Texas accompanied by N. P. Isenberger, geologist for the company in the San Angelo division.

* * *

H. D. Peckham, scout and land man for the Crystal Oil Refining Corporation of Shreveport, La., has been assigned additional duties as purchasing agent. In the latter position he succeeds John J. Thomas, who has been made assistant superintendent of refineries.

* * *

Herbert L. Pratt, president of the Standard Oil Company of New York, has sailed on the Aquitania for Europe. Mr. Pratt has rented a grouse moor in Scotland and will spend a holiday there with his family. In Mr. Pratt's absence Charles V. Meyer, vice president, will be the acting executive head of the Standard of New York.

* * *

The Ohio Oil Company will shortly transfer John B. Sutherland from the Casper, Wyo., office to Los Angeles, Calif., where he will be placed as secretary in charge of the company's work in that State. Mr. Sutherland has been with the Ohio Oil Company for about 10 years as secretary to John McFadyen, vice president of the company.

* * *

Walter C. Teagle, president of the Standard Oil Company of New Jersey, accompanied by Mrs. Teagle, now on their annual vacation in Europe, after a brief stop in Paris proceeded to Germany to confer with representatives of the Standard Oil Company of New Jersey in Germany, and with other business associates as is his custom. After leaving Germany Mr. Teagle will go to London, where he intends to confer with Sir Henri Deterding, chairman of the Royal-Dutch Oil Company.

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OIL BATH ROTARY SWIVEL

All working parts operate in a bath of oil, which eliminates the constant care of lubrication.

The swivel will not bind in operation.

No sand, grit, or other substances can come in contact with the moving parts, because all working parts are completely enclosed. This insures long life to the parts.

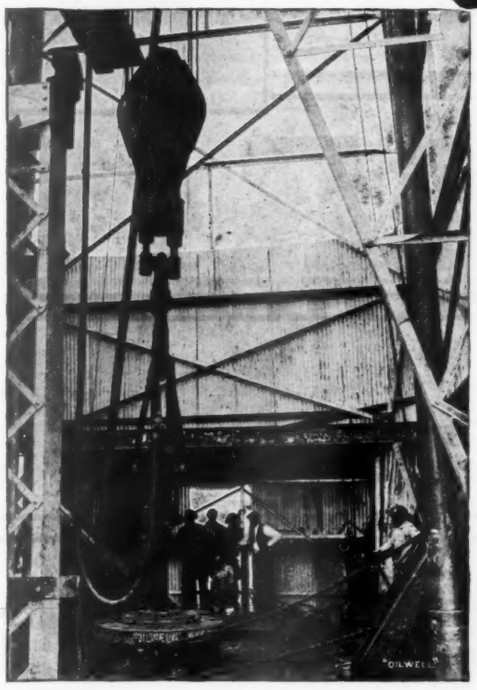
All glands are packed and adjusted from the outside, without removing any part of the swivel.

Note the bail rest which holds the bail out at an angle of approximately 45°, thus enabling the hook to be connected or disconnected without danger or difficulty.

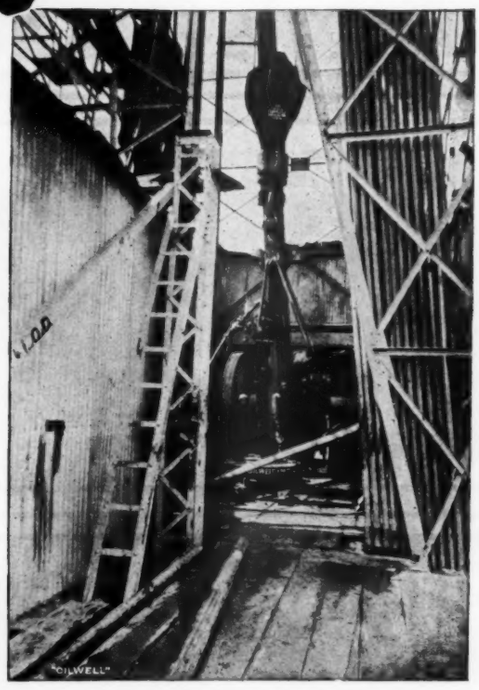
One "OILWELL" Oil Bath Rotary Swivel will do the work of two ordinary swivels, because you can use it continuously. There is no need for an extra swivel for emergencies.

Send for special Bulletin, or inquire at any of our 100 Branches.

"OILWELL" Rotary Outfits, being made up of component parts each of which is a leader in its line, are vastly superior to any other outfits.



"OILWELL" Oil Bath Swivel in the California Field.



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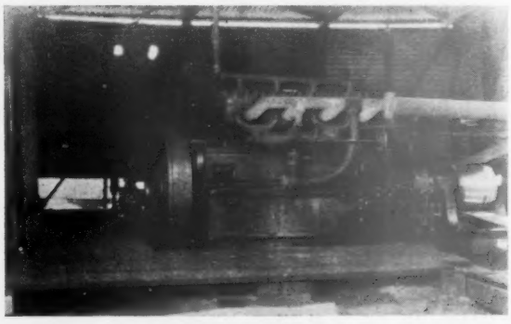

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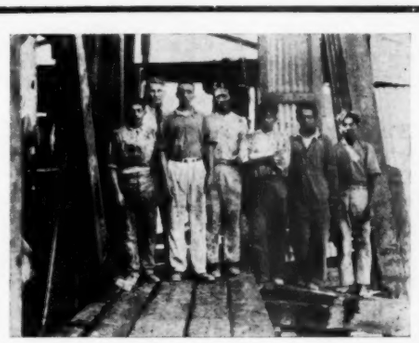

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EQUIPMENT AND SUPPLIES

LARGER DIESELS NOW FOR DEEPER PUMPING

The application of oil engines in the oil field for pumping individual wells on the beam and for pumping wells collectively on "powers" was pioneered with the horizontal oil engine. Ordinarily this work is handled by oil field type natural gas engines. There are, however, many fields opened up where natural gas is not available and for such fields Fairbanks, Morse & Co. and the Continental Supply Co. have sold about 2,000 25-horsepower type "Y" style "H" and "HB" engines for such service.

In the past three or four years there has been a decided tendency in the oil fields towards heavier equipment and engines of larger horsepower rating are required to take care of the deeper wells which are now being drilled. As a result there is an increasing demand for an engine larger than 25 horsepower for this service. In order to meet this demand the 40 and 60-horsepower style "VA" Diesels have been modified to permit the direct connection of a reversing clutch or the use of a countershaft and the governor has also been changed to permit a speed variation from 100 to 300 revolutions per minute.

NEW DIESEL-ELECTRIC TANKERS FOR ATLANTIC

The "Point Breeze," first of the three new Diesel-electric tankers for the Atlantic Refining Co., was placed in operation July 25. This boat, which was originally called the "J. M. Connally," was reconditioned by the Atlantic Refining Co. at its Point Breeze plant and, together with the other two, was purchased from the United States Shipping Board. The remaining boats, the "Sharon" and the "Bessemer," are being reconditioned by the Alabama Drydock & Shipbuilding Co. at Mobile, Ala., and are expected to go in service on September 15.

With the addition of these three boats, the Atlantic Refining Co. fleet of Diesel-electric vessels will total nine, eight built or reconditioned in this country and the other abroad by the Scott Shipbuilding Co., the latter utilizing electrical equipment supplied by the British Thomson-Houston Co.

ROLLOVER FEATURES NEW DESIGN IN TONG

A new refinement in pipe tong design is announced by Wilson & Willard Manufacturing Co. A unique rollover feature has been embodied in Wilson casing and rotary tongs, which will permit reversal when changing from running in to breaking out, without the necessity of laying the tong on the floor, according to Harry E. Hoffer, assistant general manager.

Heretofore, tongs, to be reversed, have been unhooked and then turned over by the crew. The new rollover feature, according to Mr. Hoffer, provides for the unhooking of one of the turnbuckle bars so that the tong can drop to a vertical position while held in the air by the line and can be rehooked in the reverse position all within 10 seconds.

No change has been made in the jaws of the tongs. To permit the use of the rollover feature the lever, hanger and turnbuckle rods have been redesigned.

CHICAGO BRANCH MOVES

The Chicago office of the Climax Engineering Co. has been removed to No. 1608 Harris Trust Building, 111 West Monroe Street. This office was previously located in the same building, but on a different floor. F. E. Blanchard is in charge of the Chicago branch of the Climax Engineering Co.

STEEL OPERATIONS IMPROVE SOME; GENERAL DEMAND OFF BUT LITTLE

By B. E. V. Luty

PITTSBURGH, Pa., Aug. 8.—The steel trade in the first half of the year closely matched last year in point of tonnage, with only 1½ per cent decrease in steel ingot production, but July production was about 15 per cent under that of July, 1926, and the rate of production at the present time is probably about 20 per cent under that of this date a year ago. On the whole there may have been a little improvement in mill operations in the past two or three weeks, but a year ago there was a substantial increase at this time.

Steel demand in general is off but little from that of a year ago, but there are two exceptions, in rails and oil country tubular goods. Rail buying for this year was approximately up to the usual tonnage, but the mills were particularly expeditious in completing contracts by July 1. The large purchases made late each year are nominally for delivery in the first half of the following year, but usually not a little tonnage has been carried over July 1. This year there was much less than usual. About 150,000 tons of rails were bought last month, but the deliveries are spread over quite a period, and thus the rail mills have little to do now.

Tubular Production

Production of steel in connection with oil country tubular goods is lighter than early in the year, whereas a year ago there was great activity. The lap weld capacity of the pipe industry was in practically full engagement, and butt weld furnaces were running rather well, say at over 75 per cent. Now even butt weld production is off somewhat.

Fabricated structural steel, automobile trade demand, and agricultural implement factory operations are all substantially normal for the time of year. General line operations, among miscellaneous consumers, are off but little from a year ago. With a slight decrease here and there and with the light operation at rail and pipe mills the decrease of say 20 per cent from the rate of total steel production at this time last year is readily accounted for.

The steel trade in general is likely to have some improvement, but even on the criterion of last year no very great seasonal improvement is to be expected, for the course of affairs last year was for steel production to increase, after July, through October, there being decreases in the next two months whereby December output fell below that of July.

Prices Holding

Finished steel prices are holding very well indeed all along the line, but this is not surprising considering that the various sellers fully realize that any tampering with prices would result promptly in open declines, for information as to concessions leaks out very rapidly indeed. Individual orders are not large enough to furnish any benefit in a price cut. It is only occasionally that a really fair sized order is booked. In general the flow of business is in very small individual orders. Nor are steel buyers exerting any particular pressure on the market. Each buyer merely endeavors to secure the best price going.

The valley pig iron market remains practically stagnant, with prices unchanged since the 50-cent decline late in June, Bessemer being $18.50, basic $17.50 and foundry $18.

Connellsville coke stays very dull but is perhaps a shade steadier, some accumulations of coke on track having been worked off.

The scrap market in general is dull. Prices in the Pittsburgh district have stiffened slightly on some grades, on account of interior Ohio points bidding more as they are deprived of much of their former supplies from Detroit, now going to Buffalo on cheap water rates.

WHEELER CONDENSER AND POWER SPECIALTY MERGE

Announcement is being made this week of the consolidation of the Power Specialty Co., and the Wheeler Condenser and Engineering Co., both of New York City, under the new name of Foster Wheeler Corporation. The same executives and engineers who have had charge of the two firms in the past will remain as managers of the new organization.

Branches will be maintained in principal cities of the United States as well as in Montreal and Toronto, Canada, and London, England. The manufacturing plants will be located in Cartaret, N. J., Dansville and Newburgh, N. Y., St. Catharines, Ontario, Canada and Egham, Surrey, England.

MERSELES PRESIDENT JOHNS-MANVILLE CORP

The Johns-Manville Corp. announces the election of Theodore F. Merseles as president. H. E. Manville, who has served as president since the death of his brother, T. F. Manville, in 1925, has been elected chairman of the board of directors. Mr. Merseles, who retires from the presidency of Montgomery Ward & Co., will continue as a director of that company and as chairman of its executive committee.

While the business activities of Mr. Merseles have centered in Chicago since he headed the Montgomery Ward organization in 1921, he has retained his interests in the East, where most of his business life has been passed. After a short European pleasure trip with Mrs. Merseles, he will return to New York to assume his new duties about August 15.

PROTECTIVE COATING

The Wailes Dove-Hermiston Corp., of 17 Battery Place, New York, has secured the contract for protective coating on the 250 miles of 20 inch steel pipe being laid by the Empire Gas & Fuel Co., to convey gas from the Texas Panhandle to Wichita, Kans. Bitumastic Enamel will be applied to the entire length. This is the same material used to coat 85 miles of 22 inch pipe on the Interstate line which runs between Monroe and Baton Rouge, La.

NEW BELT PUNCH AND STRETCHER ANNOUNCED

The Petrol Rotary Belt Punch, manufactured by the Victor Balata & Textile Belting Co., 38 Murray street, New York, is a recent contribution to the oil field specialties made by this company. The frame of the tool is a drop forging and the cutters are of the best quality high speed tool steel, insuring long life under field conditions. This punch cuts the holes accurately, easily and quickly in the belt ends, so the belt clamps can be attached with minimum delay and with the most efficiency.

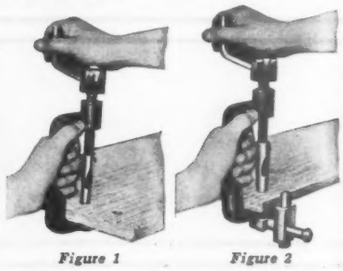
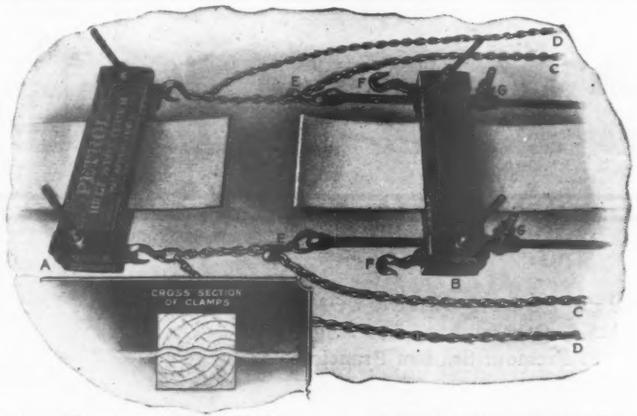


Figure 1 *Figure 2*

Illustration No. 1 shows the standard punch. Illustration No. 2 is the punch with the lateral gauge attachment.

When using the punch with the lateral gauge attachment, the holes do not have to be marked prior to punching, as this attachment gauges exactly where the hole should go. Being reversible, the lateral gauge attachment can be turned from one side to the other.

The Victor Balata & Textile Belting Co. also recently put on the market a belt stretcher especially constructed for oil field service. The manufacturers claim this belt stretcher is easily handled as it is built simply, rigidly and will not get out of order. Without any other tool it will bring the belt ends together, insuring proper length and tension of the belt and maximum power transmission when the belt is applied to the band wheel. Standard size of petrol belt stretcher is suitable for belts up to and including 16-inch width.



MOVES SEATTLE OFFICE

Chicago Pneumatic Tool Co., 6 East Forty-fourth Street, New York, announces the removal of its Seattle branch office, service department and warehouse effective August 1, 1927, from 119 Jackson Street to 1743-47 First Avenue, South, Seattle, Wash.

BRIEF NATURAL GAS HISTORY

Zwetsch, Heinzelmann & Co., Inc., 57 William Street, New York City, have published for distribution to investors, "A Brief History of the Natural Gas Industry," by H. C. Zwetsch.

The reputation of the Moore Tubular Steel Derrick is built on its strength, its long life, its ease of erection and convenience in handling. For twenty years it has gained the steadily increasing confidence of oil men because its design, together with the proper selection of materials for its fabrication, result in a structure which can be depended upon under all circumstances.

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Natural Gas Developments

KANSAS CITY FRANCHISE TO KNORPP COMPANY

AMARILLO, Tex., Aug. 6.—Contract for construction of the second gas line to Kansas City and intermediate points from the field north of Amarillo was announced by the Knorpp Pipe Line Co. of Amarillo, through J. L. Knorpp, president of the company. Empire Gas & Fuel Co., is constructing a 20-inch line from Panhandle to Wichita, Kans., which is to be extended on to Kansas City, Mo.

According to Mr. Knorpp practically all details have been completed. The ordinance granting Knorpp and his associates a 30-year franchise to supply industrial gas at 25 cents per 1,000 feet, has been passed by the Kansas City city council. The Empire company is supplying the city industrial gas at 45 cents per 1,000 feet.

Engineers for the Knorpp company estimate the 24-inch line will have a capacity of 150,000,000 feet of gas daily. It is planned to start construction work on the line by the middle of October and when completed the system will cost upwards of $30,000,000. It is planned to have the line completed late in the summer of 1928.

The pipe line company has closed negotiations for the production of several gas wells in the Panhandle.

It is reported that right of way buyers are making progress in their work which is well under way. The probable route of the line will carry it through or close to Wichita, Kans. The contract for the construction of the line was awarded to Smith Brothers of Dallas, Tex.

If the project is completed it will be the seventh gas trunk line out of the Panhandle. Lone Star Gas Co. and Northern Texas Utilities Co. have completed lines. West Texas Gas Co. and Empire Gas & Fuel Co. are building trunk lines at present. Colorado Interstate Gas Pipe Line Co. reports satisfactory progress on plans to build a line to Denver, Colo., and Phillips Petroleum Co. has announced its intention of building a line into Oklahoma to connect with the Oklahoma Natural Gas Co., system which is controlled by the Phillips company.

Completion of the seventh line would represent close to $100,000,000 invested in gas trunk lines piping gas out of the Panhandle.

A. D. Morton & Co., Bartlesville, Okla., are going ahead with plans for running a line from near Dumas in Moore County to Dalhart. Pipe for culverts and connections is being received at Amarillo. The company posted a $10,000 bond to assure the completion of the line into Dalhart by November 1.

Ouster Suit Against Doherty

KANSAS CITY, Mo., Aug. 6.—A quo warranto petition asking the State to proceed against the Kansas City Gas Co. and require it to show cause why its charter should not be forfeited, is reported being prepared by John T. Barker, city counselor. A telegram was sent James R. Page, county prosecutor, in St. Paul, Minn., asking where the petition could be sent for his signature.

In quo warranto proceedings the State of Missouri calls upon the gas company to show cause why its charter to do business in the State should not be forfeited. The company would be cited as having entered into an unlawful conspiracy with the Kansas Natural Gas Co. (the pipe line company also owned by the Henry L. Doherty interests) to charge a higher price for gas at the city's gates than necessary, which, it would be held, constituted a combination in restraint of trade and in direct violation of the Missouri antitrust law.

NATURAL GAS FOR SALT LAKE CITY INDICATED BY GAS LINE CONTRACT

DENVER, Colo., Aug. 6.—Negotiations which have been in progress for many months with the object in view of bringing together conflicting interests so that a market might be sought for the gas from the Baxter Basin Field in Sweetwater County, Wyoming, and adjacent gas pools, have reached a successful conclusion. The result is that another major natural gas line project for the Rocky Mountain district has reached the stage where construction work is expected to begin before the end of the year.

The Hope Engineering & Supply Co. and owners of gas producing properties in the Baxter Basin Field in southwestern Wyoming, the Hiawatha Dome in northwestern Colorado, and the Clay Basin structure in northeastern Utah have signed a contract whereby the Hope company is given an option to purchase the output of the other contracting parties when it is assured of an available market for a sufficient quantity of gas to warrant the construction.

The gas properties in the fields named are owned by six separate companies, and the difficulties encountered in reaching an agreement hinged primarily on the basis upon which the gas would be prorated among the different companies. An agreement finally was reached which will permit each company to furnish a set quota of gas on the basis of the open flow capacity of the wells. Now that an agreement has been reached which will permit the Hope company to go ahead with its plans, there is a strong probability that the operators will go a step farther and work out a plan whereby the Baxter Basin Field will be operated on a unit basis somewhat like the Elk Basin Field is now being operated.

Seek Market in Utah

The Hope company is looking to the Salt Lake City region for a market for the gas. This includes not only the cities of Salt Lake and Ogden, and surrounding towns, but the refinery of the Utah Oil Refining Co., a subsidiary of the Standard Oil Co. of Indiana, the big smelters of the Utah Copper Co., and sugar factories and smaller industries. Surveys and estimates for the line have already been made. It will require a 20-inch line about 200 miles long and the estimated cost is $6,500,000.

Four years ago J. C. Howard, president of the Utah Oil Refining Co., and C. R. Hurley, vice president of the Ohio Oil Co., made applications to the cities of Ogden and Salt Lake City for franchises to use Baxter Basin gas, but opposition from local utility companies arose and the project was dropped. Shortly thereafter the new negotiations were undertaken. Some opposition to the piping of natural gas from Wyoming into Utah has arisen. This is similar to the opposition in Colorado to the projected line of the Prairie Oil & Gas Co. and Standard Oil Co. of New Jersey from Amarillo to Denver and is based on the injury to the coal mining industry which some people seem to believe will take place. Governor Dern of Utah came out with a signed statement to a Utah paper recently combating the theory that the project might destroy the coal industry of the State with its $10,000,000 a year pay roll. He addressed a letter to Samuel Insull, president of the Commonwealth Edison Co. of Chicago, holding concern for the Utah Gas & Coke Co., which supplies the two cities named with manufactured gas, outlining his reasons for the prompt entry of the Baxter Basin natural gas.

Ample Supply Assured

The developed supply of gas in the Baxter Basin and other fields covered by the contract is between 300,000,000 and 400,000,000 feet per day. The areas proven for gas, but not developed, are sufficient to assure an ample supply for all needs for many years to come. The parties to the contract with the Hope company are the Producers & Refiners Corp., the Wyoming Oil Fields Co. and the Western States Oil & Land Co., both of which are affiliated with the Midwest Refining Co., the Ohio Oil Co., the Associated Oil Co. of Wyoming, a subsidiary of the Associated of California, and the Montacal Oil Co.

The Baxter Basin Field is in the center of Sweetwater County, Wyoming, and is about as large as the Salt Creek Dome in area. It lies just to the south of Rock Springs on the Union Pacific Railroad, and 20 to 30 miles north of the Colorado-Wyoming boundary. The real exploration of the structure began shortly after the publication in 1921 by the United States Geological Survey of a report calling attention to the district and recommending test operations. The first test was drilled by the Midwest Refining Co. in its No. 6-X on the NW NE Section 11-17-104. This well had shows of gas at 1,588 feet, more gas at 1,928 feet, and 2,000,000 feet in the Wall Creek sand at 1,980 feet. A flow of 25,000,000 feet was encountered in the Dakota at 2,383 feet. Subsequently, the test was carried on down to 3,353 feet, cutting the

(Continued on Page 110)

BUYS SAYRE COMPANIES

SAYRE, Okla., Aug. 6.—A deal has been closed whereby the Midwest Gas Co. takes over the Sayre Gas Co. and the Western Power & Gas Co., operating in this city. Both local companies have been controlled by W. H. Denton of Blackwell. Actual transfer of the property will be made September 1.

The Midwest Gas Co. has been interested in the local gas field for some time, owning the Coogan gas well in Section 21-9-23, and the Cavey-Caddell well in Section 20-9-23. Through these two wells it supplies Willow, Brinkman, Mangum, Granite, Blair, Altus and Snyder. It sells gas to the former Brickell company which supplies Carter and Elk City.

The Brickell Gas Co., headed by Joe Brickell of this city, was sold last week to the Erick Gas Co. for a consideration of $177,000. Transfer of the property will take effect October 1.

PIPE ORDER PLACED

LAREDO, Tex., Aug. 6.—The placing of an order for 78 miles of 18-inch gas mains by the Houston Pipe Line Co. for a line from the Lucas Field in Live Oak County to the Cole Field in Webb-Duval Counties means that construction will soon begin. This larger gas line will parallel the 12-inch line carrying gas from the Cole Field to Lucas Field, where connection is made for distribution to Houston and other places by the Houston Pipe Line Co.

HOUSTON LINE GETS FRANCHISE

A franchise to Houston Natural Gas Co. and Houston Pipe Line Co. subsidiaries of Houston Oil Co., allowing them to enter city, has been signed by the mayor.

CARBON PLANT IN CARSON CO.

AMARILLO, Tex., Aug. 6.—Kosmos Carbon Co. purchased a 38-acre tract from the Empire Gas & Fuel Co. in the SE quarter of Section 127, Block 5, Carson County, on which will be built a carbon black plant in the near future.

LONE STAR GAS LINE FROM SHAWNEE POOL

AMARILLO, Tex., Aug. 6.—Transportation of natural gas from the Shamrock Pool, in the eastern Panhandle Field, to industrial consumers in North and Central Texas has been started by the Lone Star Gas Co. through an 18-inch line. Construction work on this line, which consists of 185 miles of pipe, was completed in June, and the usual pressure tests for defective joints have been completed. The line ties into Lone Star's system at Wichita Falls, but continues eastward to make connection with the trunk line system coming out of southern Oklahoma fields at a point near Petrolia, in Clay County.

Lone Star Gas Co. has five completed gassers, with a combined flow of 125,000,000 cubic feet of sweet gas testing about 1,000 B.t.u.'s in the Shamrock Field to serve this new line, while additional gas supply has been contracted for from wells owned by independent operators in the field. Booster stations will not be used until the market demands near maximum deliveries, as the rock pressure will deliver about 30,000,000 cubic feet of gas daily to Petrolia, with the aid of suction.

TO ENCOURAGE USE OF GAS IN NEW YORK

NEW YORK, Aug. 6.—Conferences are going on between representatives of various gas companies in and near New York City concerning the establishment of a new schedule by which consumers, by increasing their use of gas, may obtain a cheaper rate. Another purpose is to induce big users of power to substitute gas for coal and oil. The present minimum rate is 95 cents a thousand cubic feet. The household rate of $1.15 will remain.

An official of the Consolidated Gas Co. said:

"The field for gas has about reached its limit so far as serving big commercial concerns is concerned. To enlarge the field it will be necessary to supplant in some measure the use of coal and oil. The way to do this is to show that heating by gas will cost less, to say nothing of the saving in labor."

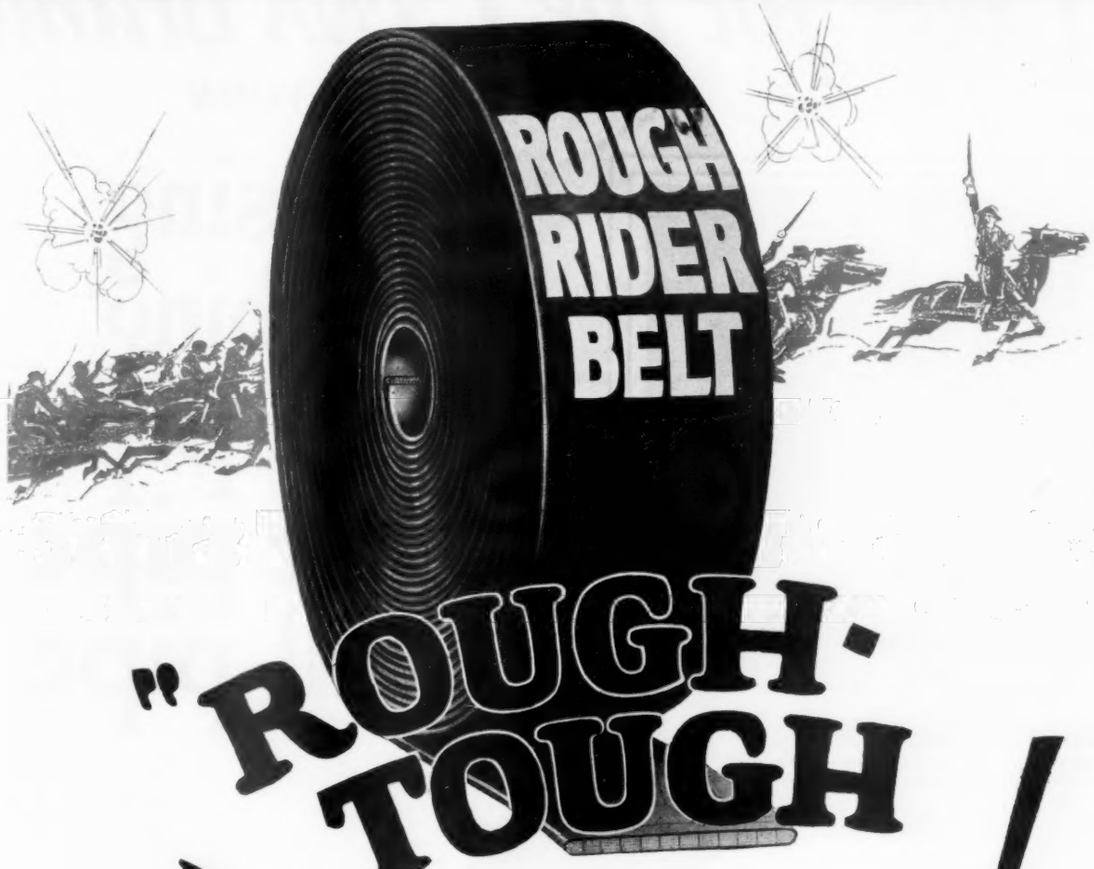
MIDWEST-WYOMING GAS LINE SERVICE STARTED

CASPER, Wyo., Aug. 6.—Service has been begun in the 75-mile gas pipe line completed by the Midwest-Wyoming Gas Co. The new line extends from the Little Buffalo Basin gas field to Nowood, where it connects with the Hidden Dome-Greybull gas line and acts as an auxiliary feeder for supplying fuel for Basin and Greybull. The line cost $1,300,000 to construct and consists of 12 and 14-inch pipe. An 8-inch line runs from the main line to the town of Worland and a smaller one from Worland to the Wyoming industrial institute at Colter. Another 8½-inch feeder is being laid to the Grass Creek oil field.

The Wyoming Gas Co. is completing the distributing system in the town of Worland, the only community not having gas, and everything will be in readiness to use gas for fuel within a few weeks.

TAKES UP NEW WORK

Hughes B. Davis, who has been associated with the public relations department of the natural gas division of the Empire Companies for the past three years, and who is at the present time chairman of Chapter 17, Doherty Men's Fraternity, joined the customer ownership forces of the western district, Henry L. Doherty & Co., under S. B. Irelan, Kansas City, Mo., effective July 1.



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KENTUCKY-TENNESSEE

(Continued from Page 60)

son County, Tennessee, when the Celina Oil Co.'s Nos. 6 and 7 on the W. Rad Hawkins farm were drilled in the sand, one being reported at 50 bbls., and the other better than 100 bbls. initial production.

The test of the Tennessee-Kentucky Oil & Gas Co. on the Dr. C. E. Price farm, near Belmont, in Coffee County, is shut down at 375 feet, and has been for the past three weeks.

The Clark well, in Pickett, that was drilling caught fire and the drilling outfit damaged so that work had to close down for the time being.

F. B. Shirley, an old-timer in oil and gas, of Dechard, Tenn., is looking over the oil fields of northern Tennessee, making his headquarters at Cookeville.

Bill Miller, another old-time operator and contractor who spent many years operating and contracting in the old Trenton Rock fields of Ohio and Indiana, and who for the past couple of years has been in Florida, is looking over the Tennessee area. An operator said a few days ago: "It takes longer to drill a 300-foot hole in Tennessee, than it does a deep Clinton sand well in central Ohio or the Trenton Rock fields of Ohio, four times the depth of the Tennessee holes."

Eastern Kentucky

In District 25, Johnson-Magoffin Counties, the Reno Oil Co.'s No. 8, on the B. F. Conley farm, is a 4-bbl. pumper. Same company is due in the sand with No. 13 on the J. P. Conley farm, same district. In District 27, the Model Oil Co. is starting No. 3 on the Frank Prater farm, and Henry Lemaster is drilling No. 1 on his own farm, same district. In District 30, Phillips, Young and others' No. 4, on the Bracken heirs' farm, is reported showing as a 5-bbl. pumper.

In District 7, Estill County, No. 15, on the J. B. Rogers farm, shows for 3 bbls., and the Adma Oil Co.'s No. 1 H. C. Stewart farm is a 2-bbl. pumper. In District 8, same county, the Superior Oil Corp.'s No. 17 J. D. Alexander farm is dry, as is its No. 6 on the Henry Miller farm. Same company's No. 7, on the Art Campbell farm, is a 1-bbl. pumper. Wood Oil Co.'s No. 3 Neal farm is rated good for 2 bbls.

In District 15, Dunham's well, on the John Rogers farm, is reported showing for 3 bbls. initially.

In District 2, Monticello Field of Wayne County, the Somerset Oil Co.'s No. 2 H. C. Coffee farm is a dry hole. In District 13, same county, W. O. Southern, Jr.,'s No. 7 Nancy Jones and others farm is a 3-bbl. pumper. Superior Oil Corp. is drilling No. 2 Coyle heirs' farm, and Spradlin & Marsh are drilling No. 1 on the Hicks heirs' farm, both in District 13.

In District 34, Elliott County, the Edra Lee Oil Co.'s second test, on the W. H. Wheeler farm, is reported a dry hole. A dry hole is also reported on Pleasant Run, in McCreary County.

Western Kentucky

West Kentucky is still the big noise in oil for Kentucky with some very interesting producing wells being found in the Ambrose Pool, the size of which was never dreamed of, and this pool makes Ohio County the most-talked-of county in Kentucky at this time. This area was overlooked 15 years ago when considerable test work was done in the vicinity of Hartford, the county seat of Ohio County. Some oil was found but the wells were not large and the drilling was for deeper pay sands. More new faces are seen in the Tri-County Field than ever before. The next few weeks will make a wonderful change for wildcatting is said to be springing up in all quarters. Barren County, one of the leading counties of the western division, failed to report any completions for the week, although numerous wells in defined limits are drilling and a series of wildcat ventures is under way in advance of production. Warren, Allen and Simpson Counties are quiet, although a 60-bbl. shallow sand well was completed in the county by S. E. Silverthorn in No. 4 on the W. H. McGinnis farm, south of Bowling Green, at a depth of 470 feet. The well is located 25 feet from the north line and 750 feet from the west line of the lease, and is the best found in the field for several months. W. B. Caudle is drilling No. 3 on the J. C. Davenport farm, same county.

Tri-County Field

The big business is being transacted in the Tri-County Field of Hancock, Ohio and Daviess Counties, formerly known as the Owensboro Field, with Ohio County far in the lead in completed work and new developments, although Daviess County will get a much stronger play than ever before when work once slips across the Ohio County line.

Production of oil in this Tri-County Field for the month of June, according to figures compiled at the State capital, amounted to 113,146.6 bbls., with Ohio County leading with 107,292.3 bbls. The June total in the three counties was a little better than 2½ times the total for last January, when but 44,441.74 bbls. was marketed through the Illinois Pipe Line Co.'s system. For the first six months of the present year, ending June 30, the total production of oil in the three counties mentioned amounted to 473,982.84 bbls., distributed by counties as follows: Ohio County, 441,513.46 bbls.; Daviess County, 19,672.63 bbls.; and Hancock County, 12,796.75 bbls.

At an average price of $1.40 a barrel, the Owensboro Messenger says: "The oil brought into the field $663,575.97. None of the nearly 500 wells in the Tri-County Field has shown any tendency to slow down under the pump, after the normal stride has been hit. On the contrary, several wells of good moderate capacity have shown a gain after three years under the pump. This last fact is pointed to by old operators as indicating the field is a stable one and will be pumping plenty of oil for some years to come, attracting to the field some of the biggest companies, and, after extensive surveys and estimates, it is said by experienced men the field has scarcely been scratched.

Producing wells are being brought in in numbers weekly, and the percentage of dry holes is very low, the operators indicate. The production for June of 113,146.6 bbls. was the record by long odds since exploitation of the field began. It was an increase of approximately 11,000 bbls. over the May production.

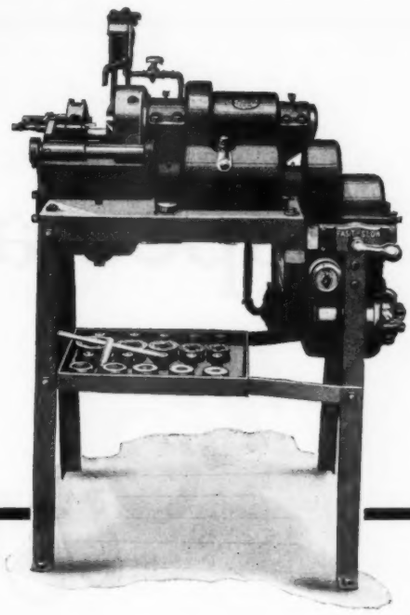
Figures just given out by the Kentucky State Tax Commission of the production in the three counties separately, in barrels, are as follows:

Month—	Daviess	Hancock	Ohio
Jan.	2,992.09	2,128.52	39,321.13
Feb.	3,157.66	2,272.29	45,208.46
March	3,400.30	2,039.35	66,642.48
April	3,247.95	2,121.09	85,462.34
May	3,413.93	1,842.00	97,586.75
June	3,460.70	2,393.50	107,292.30
Total	19,672.63	12,796.75	441,513.46
Grand total, bbls.			473,982.84
Value			$663,575.97

Ohio County Work

West of the Taylor farm, where the Ohio Oil Co. has some very fine wells, Daugherty, Buchner and others have a showing for a good producer on the Cora Wells farm, near Union Grove Church and directly west of the rich Ambrose Pool, in Ohio County. Indications are that the well may develop as large as some of the best found in the pool, and it may mean an extension of a couple of miles to the Ambrose Pool to the west. This is in practically new territory and means much for the county, for should the intervening territory between the Wells farm well and the rich part of the Ambrose Pool be productive, it will mean a heavy development will be done during the next few months. The Ohio Oil Co. also went to the west of the big pool and drilled a test in the northeast corner of the D. A. Gray 80 acres, just west of its lease on the Rodney Taylor farm. This well on the Gray farm was cased with 610 feet, sand found at from 615-67 feet and sent to a total depth of 678 feet and shot with 200 quarts, the first 24 hours' production being 150 bbls. Same company's No. 9 well, in the northwest corner of the Rodney Taylor farm, and directly east a location from the well on the D. A. Gray farm, was drilled

(Continued on Page 102)



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Just 7 seconds to cut off ½" pipe, or 13 seconds to thread; 14 seconds to cut off 2" pipe, or 28 seconds to thread it. Ream it while you are cutting the thread, chamfer it as you cut it off. This is all possible with the "TOLEDO" No. 1000M, the most perfect ½" to 2" pipe machine on the market.

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now a standard equipment

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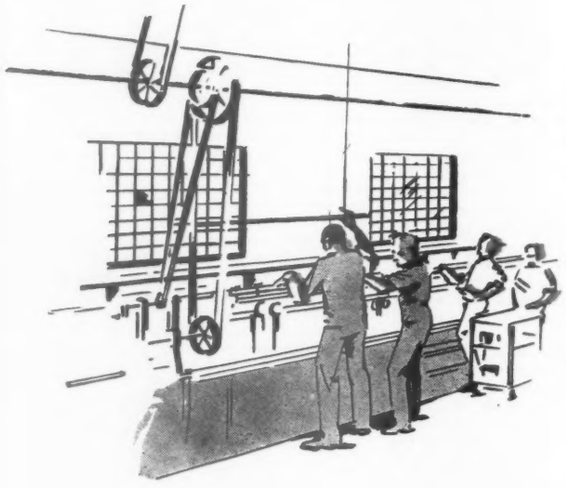
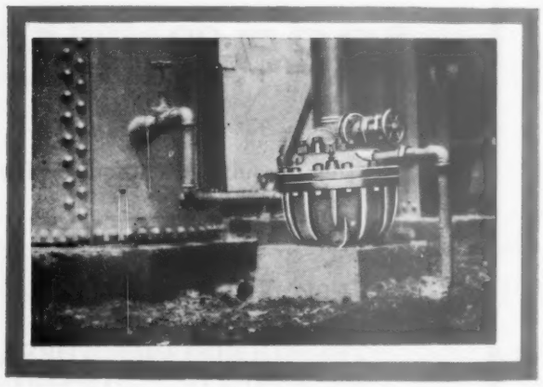
The Fisher Steam Trap, Type No. 33, a special job at first now a standard piece of equipment that you will see functioning successfully in many places where it is required to remove the condensate. At the refinery it functions properly and conduces towards the efficient operation of the plant, thereby lowering costs and saving dollars. In the field when hooked on to a steam line, it increases the efficiency of steam engines by providing dry steam at all times. It embodies the most advanced scientific principles; its mechanical construction is excellent and a series of the most exacting tests have proven its superiority.



THE FISHER GOVERNOR COMPANY



Fisher Steam Trap, Type No. 33, removing the condensate from heat exchangers, installed in the plant of the Hull Gasoline Company, at Winfield, Kansas.

397 Fisher Building
MARSHALLTOWN, IOWA, U. S. A.

MOTOR BUS LINES FROM NEW YORK TO BOSTON, MIAMI, ST. LOUIS

By N. O. Fanning
New York Bureau, The Oil and Gas Journal, Room 629, No. 101 Park Avenue, New York, N. Y.

NEW YORK, Aug. 8.—A system of motor bus lines of important dimensions now radiates from this city like the spokes of a wheel, serving as a supplement to the railroad and trolley arteries in the carrying of passengers to and from the city.

Bus lines are operating as far north as Boston, Mass., as far south as Miami, Fla., and as far west as St. Louis, Mo. The longest route is that to Miami, a distance of 1,523 miles. St. Louis is 1,014 miles distant.

There are approximately 56 bus lines from New York at present, of which the largest number, of course, travel short distances of from 10 to 50 miles. There are six lines operating to Boston, two to Philadelphia, one to Pittsburgh, two to Washington, besides those mentioned to Miami and St. Louis. On the longer routes buses leave New York once or twice a week. Buses to Boston, Washington and Philadelphia leave once to five times a day.

On the shorter routes from New York City to near-by points in New York, New Jersey or Long Island, buses run as often as 30 times a day. Most of the lines operate 12 months of the year, while a few operate only during the summer to near-by resorts.

The 56 bus lines use approximately 1,000,000 gallons of gasoline and 52,000 gallons of lubricating oil a year in their operation, including the trips in both directions to and from the city. Of course the development of intercity bus transportation is in its infancy. Considering the size and importance of New York City 56 lines represent a small number. Routes are being added continually and expansion will follow rapidly on the heels of highway improvement which is now going on throughout the East.

The consumption of gasoline and lubricating oil by the buses in the 56 routes represents only a small part of that used by buses in and around New York City, in as much as the lines included are only those operating between different cities. New York City itself has many lines running within the city. But development follows two lines, namely, the intercity and intracity development. It is difficult to say which at present is most important, but it would seem that while intracity bus transportation is fairly well limited, the intercity possibilities are practically unlimited.

Following are listed the 56 principal motor bus lines, with mileage of the routes and estimated consumption of gasoline and lubricating oil by buses operating on each route:

To and from New York City and—	No. Buses Lines	Mileage per Trip, Each Way	Annual Consumption Gasoline (Gals.)	Annual Consumption Lub. Oil (Gals.)
Philadelphia, Pa.	2	95	125,000	6,250
Atlantic City, N. J.	4	136	69,000	3,450
Albany, N. Y.	2	156	23,000	1,150
Pittsburgh, Pa.	1	387	4,000	200
Boonton, N. J.	1	30	26,000	1,300
Asbury Park, N. J.	3	54	32,000	1,600
Miami, Fla.	1	1,523	8,000	400
Bear Mountain, N. Y.	2	47	4,000	200
Bellaire, L. I.	2	28	31,000	1,550
Jamaica, L. I.	1	12	26,000	1,300
Monticello, N. Y.	4	109	26,000	1,300
Trenton, N. J.	1	75	33,000	1,650
Bogota, N. J.	1	11	12,000	600
Boston, Mass.	6	229	167,000	8,350
New Haven, Conn.	1	77	39,000	1,750
Camden, N. J.	1	95	43,000	2,150
Pittsfield, Mass.	1	170	25,000	1,250
St. Louis, Mo.	1	1,014	21,000	1,050
Cold Springs, Harbor, L. I.	1	31	1,000	50
Newburgh, N. Y.	1	60	9,000	450
Nyack, N. Y.	1	30	53,000	2,650
Paterson, N. Y.	1	16	14,000	700
Westwood, N. J.	1	22	67,000	3,350
Hollis, L. I.	1	12	26,000	1,300
Hackensack, N. J.	1	14	15,000	750
Kingston, N. Y.	1	98	11,000	550
Lakewood, N. J.	4	65	24,000	1,200
Long Beach, L. I.	3	24	13,000	650
Newark, N. J.	1	13	9,000	450
Princeton, N. J.	1	52	23,000	1,150
Rutherford, N. J.	1	15	39,000	1,950
Washington, D. C.	2	243	20,000	1,000
Woodridge, N. Y.	1	125	18,000	900
Total	56	....	1,056,000	52,800

Most bus companies purchase gasoline in bulk, having their own garages and tanks. They buy what is called U. S. Motor grade in tank cars, the present price of which at eastern refineries is 8¾ cents a gallon. Those which do not use enough to require tank car delivery buy from local jobbers who maintain bulk stations, paying slightly more than 8¾ cents—sometimes around 10 cents a gallon.

MEXICAN EXPORTS DROP IN FIRST HALF YEAR

Mexican exports of light and heavy crude, topped crudes and distillates from the Tampico district were 30,244,798 bbls. for the first six months of 1927, against 46,444,597 bbls. for the same period of 1926.

Although the Mexican Petroleum Co. is exporting 50 per cent of all oil from the Republic, its exports of 13,014,790 bbls. for the first half of this year, were 5,162 362 bbls. less than in the first six months of 1926.

Transcontinental Petroleum (Standard Oil of New Jersey) decreased from 10,108,980 bbls. to 4,011,662 bbls. and it is anticipated this company will show far greater percentage of loss for the balance of the year. The same is probably true of Mexican Gulf, Dutch-Shell, Freeport Sulphur and The Texas Company. Mexican Sinclair is the only company expected to make a better showing because of increased production in Cacalilao, which may enable it to ship during the balance of the year almost as much oil as in the last six months of 1926.

Total figures of exports by companies for the first six months of 1927 together with 1926 totals, follow:

	First 6 months 1927	First 6 months 1926
Pan American	13,014,790	18,177,152
Standard of N. J.	4,011,662	10,108,980
Mexican Gulf	810,061	2,051,652
Royal Dutch	3,688,325	3,147,616
Mexican Sinclair	2,300,892	2,969,951
Mexican Eagle	4,421,479	5,259,751
East Coast	284,522	549,131
Texas	676,188	830,301
Miscellaneous	1,036,879	3,350,063
Total	30,244,798	46,444,597

PRAIRIE P. L. SHIPMENTS

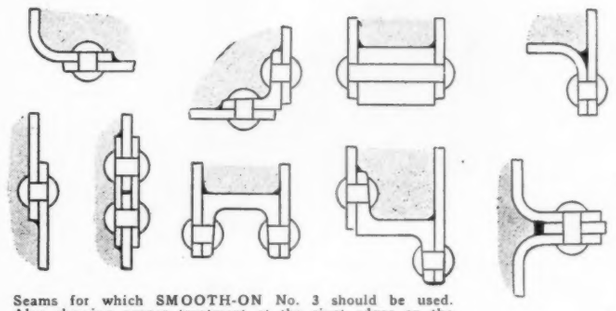
Shipments of the Prairie Pipe Line Co. for July totaled 5,788,133.62 bbls., a daily average of 186.714 bbls. This is a daily average increase of 3,196 bbls. over June, when shipments totaled 5,505,551.54 bbls. for a daily average of 183,518 bbls.

LORD COWDRAY'S ESTATE

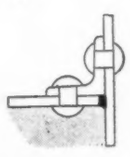
Estate of the Right Honorable Weetman Dickinson Pearson, First Viscount Cowdray, who died May 1 at the age of 70, was valued at £4,000,000, "as far as can at present be ascertained," when probated recently to the Cowdray Trust, Ltd., as sole executor. It is liable to a death duty of £1,600,000 at the maximum rate of 40 per cent.

RIVETED SEAMS

—they *stay* tight against oil, steam or water pressure if made or repaired with SMOOTH-ON



Seams for which SMOOTH-ON No. 3 should be used. Also showing proper treatment at the rivet edges on the pressure side. SMOOTH-ON is indicated by the black triangles.



Seams for which SMOOTH-ON No. 1 or No. 2 should be used.

MANY prominent boiler and tank builders employ SMOOTH-ON at seams, rivets and stay bolts because it makes permanently tight joints where caulking, soldering, etc. are not thoroughly successful.

If you want to be ready for a quick and sure check on any seam or staybolt leak, keep on hand a small quantity of SMOOTH-ON Iron Cements, Nos. 1, 2 and 3, and use as indicated in the diagrams whenever the occasion demands:

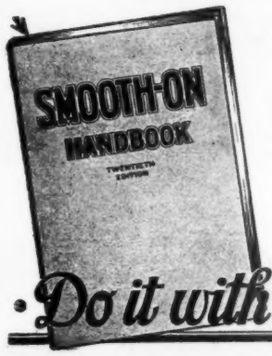
For joints shown in the top group, SMOOTH-ON No. 3 may be applied to the entire length of the seam, using a stiff brush. When working pressure is put on the boiler, tank, etc., the SMOOTH-ON is pushed well into the seam and all leakage stops.

For joints in the second group, SMOOTH-ON No. 1 or No. 2 (No. 1 *quick* hardening, No. 2 *slow* hardening) is made into a stiff putty by mixing with water, and a layer applied to the entire length of the seam with a trowel makes a good fillet between shell and head. Allowed to stand long enough to metallize, the SMOOTH-ON makes the seam perfectly tight.

Under some conditions a mixture of SMOOTH-ON No. 1 or No. 2 with equal parts by volume of SMOOTH-ON No. 3 is preferable to either alone. This mixture is unequalled for use under the nuts of staybolts and mainstay braces. The receptacle under the nut should be filled with the mixture.

For leaks at all of the types of seams mentioned above, and at staybolts and rivets, SMOOTH-ON No. 3 which has been applied *inside* with a brush or trowel will be forced into the voids when operating pressure is turned on, and will stop all leaks. By forcing or drawing the cement into the seams, it may also be successfully applied on the outside.

Get SMOOTH-ON in 1-lb. or 5-lb. can or larger keg from any supply house, or if necessary from us direct.



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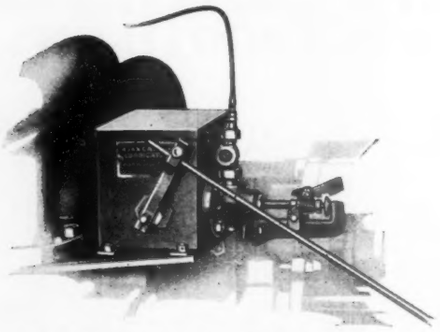
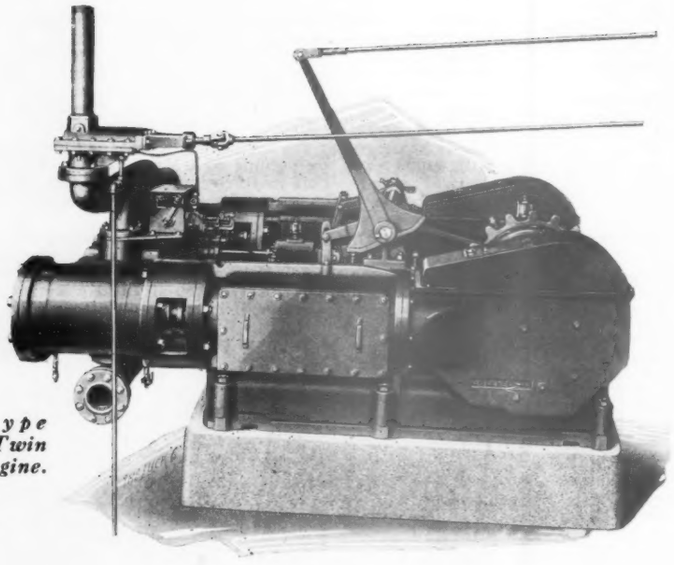
8-11-27

Better Lubrication—Safer Opera



Ajax-Carson Sight Feed Lubricator —regular as your watch

The Ajax-Carson, Sight Feed Lubricator offers automatic lubrication for all steam drilling engines. Now regular equipment on Ajax and Ideal-Ajax Engines. Mechanically operated, valveless, this device cannot get out of order. It regulates quantity of oil delivered to speed of engine, and forces same amount against any steam pressure. Sight feed shows operation of the lubricator at all times.



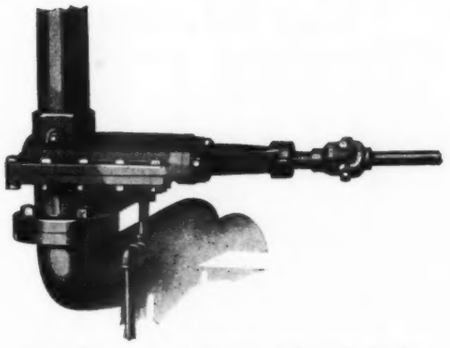
Enclosed type Ideal-Ajax Twin Drilling Engine.

AJAX-DRILLING

tion with this New Ajax Equipment

The new Ajax-Greenwood Safety Throttle Valve, now standard equipment on Ajax and Ideal-Ajax Engines, has gained instant popularity in every oil field. When the throttle is closed, a by-pass opens from steam chest and manifold, releasing the steam content, and preventing built-up pressure within the cylinders.

The fact that the Engine cannot turn over unexpectedly adds measurably to the safety of operator and crew.



Ajax-Greenwood Safety Throttle Valve —prevents built-up pressure.

AJAX ENGINES

Made by

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THE NATIONAL SUPPLY COMPANIES
NSCO

In every oil field.

STEAM ENGINES

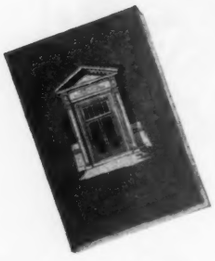
SIVYER CASTINGS
DEPENDABLE

Sivyer Castings can be forged and welded

See the Sivyer Exhibit at the Oil Show
Booth Number 6, Texas Building, will furnish the information on how to cut the heavy expense of oil tool and machinery parts.

Lifting 30,000 Pounds of Dead Weight

The small casting shown above is a twin socket lever used on the genuine Barrett Automatic Lowering Jacks, cast in Sivyer Special Carbon Steel. The fact that this casting is strong enough to lift a dead weight of 30,000 pounds—not once, but many times—is convincing evidence of the interior soundness of Sivyer Special Carbon Steels. Sivyer's foundry practice assures steels and alloys with a uniform composition of metal—without blow holes, and without weak sections. That is why so many manufacturers are changing from other metals and other methods to Sivyer Alloy—long-life, low-cost steels.



On many parts Alloy Castings are cutting direct costs or establishing new service records—and manufacturers are awakening to their tremendous possibilities.

Based upon more than 15 years of pioneering and making of Alloy castings, this booklet can help every manufacturer who is interested in getting new casting performance and costs.

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SIVYER STEEL

SIVYER STEEL CASTING COMPANY, MILWAUKEE

ROCKY MOUNTAIN AREA

(Continued from Page 52)

of the Niobrara at 1,730 feet and looked like it might be a commercial well in the Frontier since the showings increased all the way down. The Frontier has never produced oil in Colorado, but generally carries water. The fact that it showed no water makes the prospects in the Dakota, expected within the next 200 feet, more encouraging.

Utah

Interest in southeastern Utah underwent a slight revival this week with a report that the Union Oil Co. of California's No. 1 well on NW Section 16-30-25, San Juan County, had encountered a showing of oil and gas on the Lisbon structure. This structure is located only 8 miles west of the Colorado boundary and 25 miles southeast of the Colorado River structures south of Moab. The 10-inch casing was set at 2,500 feet where the hole had gone out of the salt and 4 feet into lime showing a little sulphur water. It then went back into salt which continued to about 2,560 feet when the cuttings indicated that it was back into lime. At this depth the hole commenced making some gas and a little oil. The flow of gas was estimated at 1,000,000 feet, and the oil rose about 300 feet in the hole. It was decided not to take chances on account of the remote location of the well, and operations were suspended after the hole had been filled with water to hold back the pressure. A control head will be installed, the boilers moved back and other precautionary steps taken before testing the horizon. The strike may prove to be an important one, or it may be merely a showing in a thin lime stratum similar to those encountered in the Colorado River tests. It is far enough away from the salt domes south of Moab, however, to make the results extremely important. The hole has gone through about 900 feet of salt so far.

The Midwest Exploration Co.'s No. 1 Hughes, Section 30-40-19, Elkridge Dome, San Juan County, is reaching an interesting stage. It is now drilling in lime at 3,020 feet and results may be expected at any time. Elkridge is one of the largest structures in this district, having more than 80,000 acres inside the closing contour. It is far enough south to be out of the salt dome area and so far has penetrated only a few thin strata of salt. More than half-a-dozen companies are contributing to the cost of the test.

Operations in the southeastern part of the state have slowed up considerably with only three or four wells making any progress. Utah Southern Oil Co. is drilling on the Cedar Mesa and East Anticlines, south of the salt domes, but they are not yet sufficiently deep to be out of the routine.

Two wells are drilling in the vicinity of Price in the central part of the state. The McGee & Holmes Syndicate's No. 1, Section 14-15-10, is drilling below 1,600 feet, and the Price Petroleum Co. on Section 16-14-10, is drilling at 2,265 feet in crumbly dark shale showing some rainbow colors. The Utah Oil Refining Co. is going back into the Ashley Valley District in the Uintah country, to put down a test on Section 23-5-22. The company drilled in that region a few years ago and opened a big flow of gas. This gas was found below the Dakota but the company is convinced that it did not reach the Sundance sand, which the Midwest found productive on the Colorado side last March, and will make this test to that horizon.

Wyoming

In the Oregon Basin Field, Park County, the Illinois Pipe Line Co. is completing the pumping station in the field for the new 8-inch line to Cody. About 20 rigs are up or building and of this number 6 are drilling at various depths. The Ohio Oil Co.'s discovery well was opened for a short time a few days ago and made 250 bbls. in 13 minutes.

In the Buffalo Basin Field, Park County, where the Midwest Refining Co. and the Wyoming Gas Co. recently completed the new gas line, the Ohio Oil Co. has a well shut down waiting for cement to set, in Section 36-47-100, and the Midwest Refining Co. has a fishing job in Section 2-47-100. This field is to be operated under the unit plan if all the lease holders can agree on the plan proposed.

In the Salt Creek Field, the Midwest Refining Co. completed four new wells, one Lakota producer and three in the Wall Creek sands. The Midwest Oil Co. has a Lakota gusher that made 2,071 bbls. in Section 27-40-79. In Section 23-40-79, the same firm has a second Wall Creek sand well that is good for 216 bbls. and another in Section 36-40-79 that will do 19 bbls.

The Wyoming Oil Fields Co. brought in a small pumper in Section 25-40-79.

The Lakota well of the Midwest Refining Co. is shut in as are all the other Lakota wells in the Salt Creek Field.

There appears but little hope that a pipe line will be laid from the La Barge Field to the railroad this season. The California Petroleum Co., drilling a deep test in Section 34-27-113, is below 4,300 feet and nothing of importance has shown yet in the deep strata. This well would make a commercial producer at about 800 feet and in case it proves to be a duster in the deep sands it will be plugged back to the shallow pay and produced there.

Montana

The Hope Engineering Co. of Mt. Vernon, Ohio, has started work on an 8-inch gas line from the Cabin Creek Dome to Miles City. This project has been under consideration for some time. The line will be welded. According to the contract the line will be completed and in operation before winter.

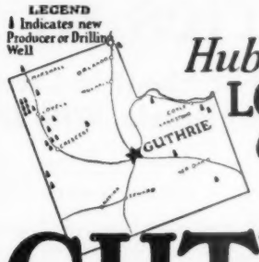
Nothing definite is to be had in the way of information on the production of the Bannatyne well. This well, located on a newly discovered structure 40 miles northwest of Great Falls, has now been on the pump for about a week, but only one shift has been employed and the well has not been given a 24-hour test. When it was first connected up, the hole was partly filled with oil that had accumulated during the night, and during the first 11 hours pumping 38 bbls. of oil went into the tank. The oil seems to rise to a depth of about 500 feet between pumping periods. The well is producing from a 72-foot sand that has not been accurately identified as that producing in any other field in the state.

The Bannatyne well has attracted the attention of operators and investors, and immediate drilling of four more wells on the structure has been announced. Speer, Craig and McCutcheon, principal stockholders in the Genou Oil & Gas Co., which drilled the discovery well, will start a new hole on the northeast corner of Section 8-25-1e, on the same 80-acre tract as the first well. The Fidelity Oil Co., recently organized in Great Falls, will drill southeast of the discovery well, while Brittain and DeSchon will put down a hole in Section 34-26-1, to the northwest. W. S. Hawley, president of the Big West and the Big Eleven, will also drill on the structure. The tests are so well scattered that they should prove rather decisively the extent of the field and the value of the production.

Locations have been made for a dozen or more wells in the vicinity of the Radigan Hungerford well in the Kevin-Sunburst Field, and announcement has been made of a sufficient number of additional projected wells to bring the total to 21. It is asserted by Montana oil men that the well has not been given a continuous production test, and that the 1,250 bbls. put into the pipe line the first day after completion does not represent the capacity of the well.

The Adams Haskins' No. 12 in the east side pool reports 300 feet of oil in the hole from the Ellis sand. The well will make a small pumper. The Barmac Oil Co.'s No. 7 Stannard was shot and will probably make a 30-bbl. well. The Diamond T Rice's No. 6 came in a 10-bbl. well after a shot, being something of a disappointment after the completion of a 600-bbl. well by this company less than two weeks ago. The Dakota Montana Oil Co., which completed a 600-bbl. well

(Continued on Page 92)



Hub of the Greater
LOGAN COUNTY
Oil Area

GUTHRIE

Logan County, Oklahoma, has become a proven oil field and Guthrie is the hub of an oil area which is fast developing from all directions.

This situation finds Guthrie ready to take its place among the oil cities of the Mid-Continent field—better prepared, in fact, than most cities have been to handle quickly and conveniently an unexpected increase in population and business.

Guthrie has unexcelled railroad facilities to all sections of the Greater Logan County Oil Area. There are good highways in most directions and road improvements are being made rapidly. State Highway No. 4 goes through Guthrie north and south and State Highway No. 33 gives Guthrie an east and west highway.

You can live in Guthrie and carry on oil field work conveniently—and Guthrie is a good place to live. Guthrie is a city of home owners and one of the leading fraternal centers of the world. It has good schools, churches of all denominations and an adequate park system. Streets are paved and sewers are laid. There are 20 hotels and rooming houses. Recreation of all kinds is available, golfing, tennis, swimming and fishing.

Profitable Investments

Profitable investments can be found in the friendly Logan County oil towns of Crescent, Lovell and Marshall.

Petroleum Club

Guthrie has established and maintains a Petroleum Club for the exclusive use of the oil fraternity, cards of membership to which are issued on request through the Chamber of Commerce.

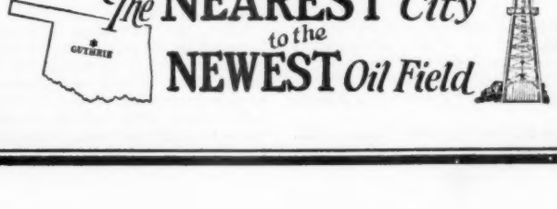
Come to Guthrie and see the near-by oil fields

Now is a good time to investigate the possibilities of Guthrie and the Greater Logan County Oil Area. Come to Guthrie first. Here you will find a cordial welcome and you can obtain all the information you need concerning any section of the oil fields and how to get there.

Real estate dealers are using the Chamber of Commerce as a clearing house and the Chamber of Commerce is taking an active interest in finding homes and business locations for new residents.

For more information about Guthrie and the Greater Logan County Oil Area, write

Guthrie Chamber of Commerce
Guthrie, Okla.



Refineries in Foreign Countries

List of Plants in Czechoslovakia, France, Germany and Great Britain, With Discussion of Marketing Conditions

CZECHOSLOVAKIA

From report by Dr. Alois Broft, office of American commercial attache, Prague.

The 11 petroleum refineries in Czechoslovakia, with a total annual capacity of 400,000 tons, are widely distributed throughout the country, being located without exception in or near the more important industrial centers. Three plants account for 67 per cent of the total capacity; the remaining plants are of minor importance and in no case have a capacity exceeding 30,000 tons per annum. (Metric tons are used throughout the Czechoslovakian section of this bulletin.)

The largest individual unit is the plant of David Fanto & Co., with an annual capacity of 150,000 tons. This refinery is located at Pardubice, a railway junction some distance east of Prague. Two smaller plants are also located in the vicinity of the capital. The second largest plant, the Odra Mineral Oil Co., with an annual capacity of 60,000 tons, is located at Bohumin, in Silesia, a few miles from the Polish frontier. This district is highly industrialized, and three more refineries are found at Moravska Ostrava, Sumperk, and Privoz. The third largest refinery—that of the Apollo company, with a capacity of 55,000 tons—is situated at Bratislava, in Pressburg, an important Danube port and capital of the Province of Slovakia. The three remaining refineries are located, two in Slovakia at Trstena and at Dolne Mihalany, and one at Munkacevo, in the easternmost Province of sub-Carpathian Russian.

Location and Ownership

Petroleum refineries in Czechoslovakia are largely foreign owned or controlled by Austrian, Polish, or French capital. Their respective locations and ownerships are given in the following list, arranged in the order of their relative importance.

Aktien-Gesellschaft fuer Mineraloelindustrie vorm. David Fanto & Co., Pardubice, Bohemia.—Before the war this plant, with 150,000 tons capacity, capitalized at 24,000,000 Czechoslovak crowns and financed by the Zivnostenska Bank, Prague, belonged to the D. Fanto concern, of Vienna, Austria. It is now operated in conjunction with its associated companies in Poland, Austria, Hungary, Rumania, and France. All of these countries, though independently organized in their respective countries, are controlled by the Societes Reunies des Petroles Fanto, Societe Anonyme, Zurich, Switzerland.

Odra Mineraloelindustrie Aktien-Gesellschaft, Bohumin, Silesia.—This plant of 60,000 tons capacity is owned by the Austrian group, Louis Rothschild and Max Gutmann, of Vienna, Austria. The Zivnostenska Bank, in Prague, is also financially interested in this company.

Apollo Mineraloelraffinerie Aktien-Gesellschaft, 3 Culenova Ul., Bratislava, Slovakia.—This plant of 55,000 tons capacity belongs to the Polish "Dombrova" concern, which used to be known under the name of Galizische Karpathen Gesellschaft vormals Bergheim & Mac Gavey.

Kralupska rafinerie Mineralnich Oleju, Lederer & Co., 44 Hybernska, Prague II. This plant of 28,000 tons capacity is a local concern in which Austrian capital is also participating. It co-operates with the General Banking Corp., of Bohemia, Prague.

Mineraloelraffinerie Maehrisch & Schoenberg Ges. m. b. H., Weikersdorf bei Sumperk, Moravia. — This plant of 28,000 tons capacity is a limited liability company, owned by "Premier," a French concern.

Privozer Mineraloelwerke Ges. m. b. H., Privoz, Moravia.—A plant of 25,000 tons capacity; a limited liability company owned by M. Thorsch Soehne, a banking house in Vienna, Austria.

Ceska Akciova Spolecnost pro Rafinovani Petroleje v Koline, 17 ul. 28 Rijna, Prague II.—A plant of 25,000 tons capacity, operated by a local joint stock company controlled by the Prague Credit Bank, Prague. The refining plant, located at Kolin, has been rented to the Vacuum Oil Co., which operates it for its own account.

Anton Himmelbauer & Co., Mineraloelfabrik, Moravska Ostrava, Moravia.—A plant of 12,000 tons capacity, with the majority ownership Austrian, the balance domestic. At the present time the company works up only such raw material as is supplied by the "Galizia" concern, in Drohobyez, Poland, and by Gartenberg & Schreier, Jaslo, Poland. Finished products are then re-exported for the account of these firms, respectively.

"Karpathia" Petroleumraffinerie Aktien-Gesellschaft, Munkacevo. — In sub-Carpathian Russia; 6,000 tons capacity. Owned by the Polish concern "Galizia," Drohobyez, Poland.

"Vesta" Slovakische Mineraloelindustrie, Trstena, Slovaika.—A plant of 4,000 tons capacity, owned by the Aktien-Gesellschaft fuer Mineraloelindustrie vorm. David Fanto & Co., in Pardubice.

Weinberger & Ortner, Mineraloerraffinerie, Dolne Michalamy, Zemplin, Slovakia.—A plant of 1,000 tons capacity. A partnership representing local and Hungarian capital.

Plant Equipment

Plant equipment of the Czechoslovak petroleum refineries is practically all of domestic make and prewar manufacture, no important replacements and additions having been made since 1912. That these original installations were of high quality is evidenced by their continued operation with what is said to be an adequate efficiency after two decades of service. Postwar subnormal activity and adverse financial conditions in Czechoslovakia did not and do not yet permit of large investments in new installations. On the other hand, machine tools and other shop equipment used at the refineries are modern.

Sources of Crude Petroleum

For various reasons such oil regions as exist in Czechoslovakia have never been consistently exploited, the average annual production of crude petroleum amounting to not more than 20,000 tons. The domestic refining industry is, therefore, almost wholly dependent upon outside sources for its supplies of raw material. Prior to the World War crude oil came principally from the United States and Mexico.

After the war these sources became inaccessible, largely owing to depreciated currency. For a time supplies were obtained from Poland and Rumania, but as the production of these countries fell below their own refining capacity exports of crude oil were soon prohibited. Czechoslovak refineries were then forced to import and work up semiproducts, coming chiefly from Poland and Rumania. In recent years, however, imports of crude oil from other sources have gradually been restored and a corresponding decline in the imports of semiproducts has been noted.

In 1925, the United States exported to Czechoslovakia 31,962 metric tons of crude oil, or 56 per cent of the total crude oil receipts for that year. The balance was almost exclusively of Russian origin, being received indirectly through Germany, via Hamburg, and through Italy, via Fiume. In 1926, there was a considerable increase in imports of crude oils from Russia, most of which were shipped direct, only small quantities being received through Italy and Germany. In that year the direct shipments from Russia increased to 49 per cent of the total imports, while those from the United States declined to 12 per cent of the total Czechoslovak imports of crude oils. It is highly probable that shipments of crude oil from Russia will continue to increase, it being reported that a contract has been closed between the Soviet Russian Naphtha Syndicate and the "Fanto" and "Apollo" refineries for the delivery of 87,000 metric tons of crude oil during 1927.

Semiproducts, which are imported for further refining from Poland and to a small extent from Rumania, comprise principally petroleum distillate, raw benzine, distillation residue, and oil distillate. These came to a total of 89,426 tons in 1926, as compared with 98,223 tons in the preceding year. Total imports of crude oil and semiproducts, however, have not yet begun to approach the total domestic refining capacity of 394,000 tons.

The total capacity in crude consumption per year of the 11 Czechoslovak petroleum refineries previously referred to is estimated at 394,000 tons. During the year 1926, 10 of these refineries were operated on an average basis of 33 per cent of their full capacity. Only the refinery at Kolin, operated by the Vacuum Oil Co., maintained full production.

Products Manufactured

Czechoslovak petroleum refineries manufacture the following products (in order of their importance): Kerosene, gasoline, light oils, lubricating oils, gas oils, fuel oils, and paraffin. Cylinder oils and special lubricating oils, such as oils for steam turbines, water turbines, and other special machines, are not produced in this country.

Accurate production figures for Czechoslovakia are not available. The following estimate of the production for 1926 may be regarded, however, as fairly reliable:

	Metric tons
Kerosene	60,000
Gasoline	40,000
Light oils and lubricating oils	25,000
Gas oils and fuel oils	20,000
Paraffin	4,500

Changes in Plant Equipment and Ownership

Not only in Czechoslovakia but throughout eastern Europe the outstanding shift in refinery ownership since the war has been the reallocation of the holdings of two American operators, the Vacuum Oil Co. and the Standard Oil Co. of New Jersey. In 1926, the American Petroleum Co., of Czechoslovakia (Standard Oil), surrendered all plants and equipment relating to the distribution of gasoline and petroleum in Czechoslovakia, Austria, and Hungary to the Vacuum Oil Co., while the latter, in turn, surrendered its plants, equipment, wells, etc., in Poland to the local Standard Oil affiliations in that country.

Under the present unfavorable conditions in Czechoslovakia—high cost of investment capital, heavy industrial taxation, and the limited outlet for refined products—little or no inducement is offered to domestic manufacturers in the undertaking of new installations. It is possible, however, that the Vacuum Oil Co., the only American refiners now in the field and operating the small plant at Kolin under lease, may undertake the expansion of its refining capacity in conjunction with outlets controlled in adjoining territory. It is even rumored that this company has under consideration the construction of a new refinery at Prerov, Province of Moravia, involving an approximate cost of 25,000,000 Czechoslovak crowns (about $750,000). If this were carried out, it is understood that practically all equipment would be of American origin. The proposition is only tentative, however, and nothing definite has yet been decided.

Another rumor is to the effect that the Dutch-Shell interests intend to buy one or more of the refineries now established in Czechoslovakia. This rumor, however, is believed to be without foundation.

FRANCE

From report by Trade Commissioner Daniel J. Reagan, Paris.

There are 10 petroleum refineries in France, only one of which, however, is operating to any extent and that one only intermittently. Formerly owned by Paix & Compagnie, this plant is now owned by the Societe Generale des Huiles de Petrole (Anglo-Persian). While most of these 10 installations were established as refineries, subsequent alterations in their equipment have limited the range of their activities to the refining and rectification of a limited number of products.

History of the French Refining Industry

From 1863 to 1904 the refining of crude petroleum in France was carried on to a relatively large extent. Until 1881 the refiners enjoyed a high degree of protection through heavy import duties on refined products. From 1864 to 1881 these tariff rates ran from 10 to 12 francs per 100 kilos. Enormous profits were accumulated during this period, it being reported that one company realized profits exceeding 700,000,000 gold francs (more than $100,000,000). Popular opinion, however, demanded a revision of this protection, and in 1881 the tariff was reduced to 7 francs and in 1893 to 3.50 francs.

Because of the reduced tariff on refined products, some of the French refineries limited their activity to the rectification of a few products, while others were obliged to cease operations entirely. In 1904 the duty was further reduced to 2.25 francs per 100 kilos, although it amounted to only 89 centimes after the refiners had met the various fiscal demands imposed upon them. Under these conditions the refining of crude petroleum in France ceased.

Since 1893 many efforts have been made to revive the industry, but with no great measure of success. During the war, however, there was some revival of activity in these plants under government operation. In 1919 crude petroleum was admitted to the refineries without the payment of any duty. The refined products then paid the ordinary duties upon being shipped from the plant, less certain taxes, amounting to 2.25 francs per 100 kilos. The hope of encouraging the industry by these means, however, remained unrealized. The only tangible result was the purchase of the Paix & Compagnie refinery, at Douai, which had a capacity of 100,000 tons per year, by the Anglo-Persian group.

A more recent law modified the conditions of admission to include not only crude petroleum but also the fractional products and reduced the interior tax

(Continued on Page 94)

SURVEY CONTINUED

In this issue The Oil and Gas Journal continues the publication of a survey made by the Department of Commerce covering the operations of refineries in foreign countries. In the July 21 issue (page 153) and July 28 issue (page 78) reports covering North and South America, Austria and Belgium were published.

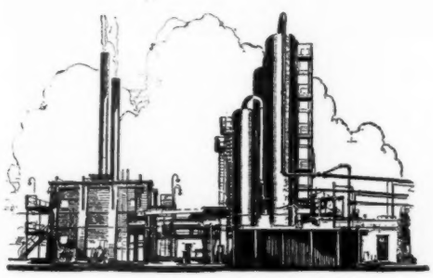
The remainder of the report will be published in later issues.

KELLOGG PIPE STILLS

CERTIFIED PERFORMANCE

Of the many Kellogg pipe stills in use, not a single unit has ever fallen down on a guarantee.

In fact, the actual performance of every Kellogg still is exceeding the specified capacity for which it was originally installed. One plant, erected under a guarantee to handle 5,000 barrels, is now running 6,500 barrels in regular daily operation.



KELLOGG

CROSS CRACKING PLANTS—BUBBLE TOWERS—PIPE STILLS—HEAT EXCHANGERS—GRAY TREATING TOWERS—TREATING PLANTS

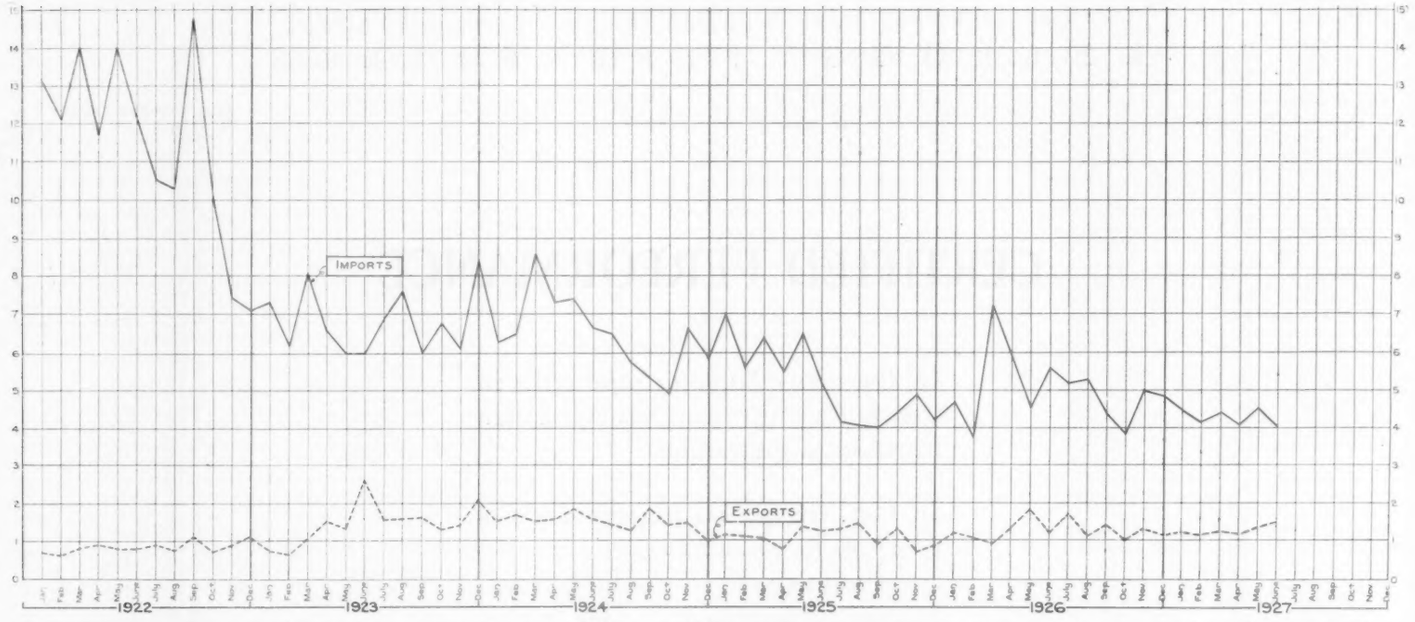
THE M. W. KELLOGG CO., 7 DEY STREET — NEW YORK

KANSAS CITY, MO., 700 BALTIMORE AVE. — SAN FRANCISCO, CAL., 444 MARKET ST.
LOS ANGELES, CAL., 329 PETROLEUM SECURITIES BLDG.

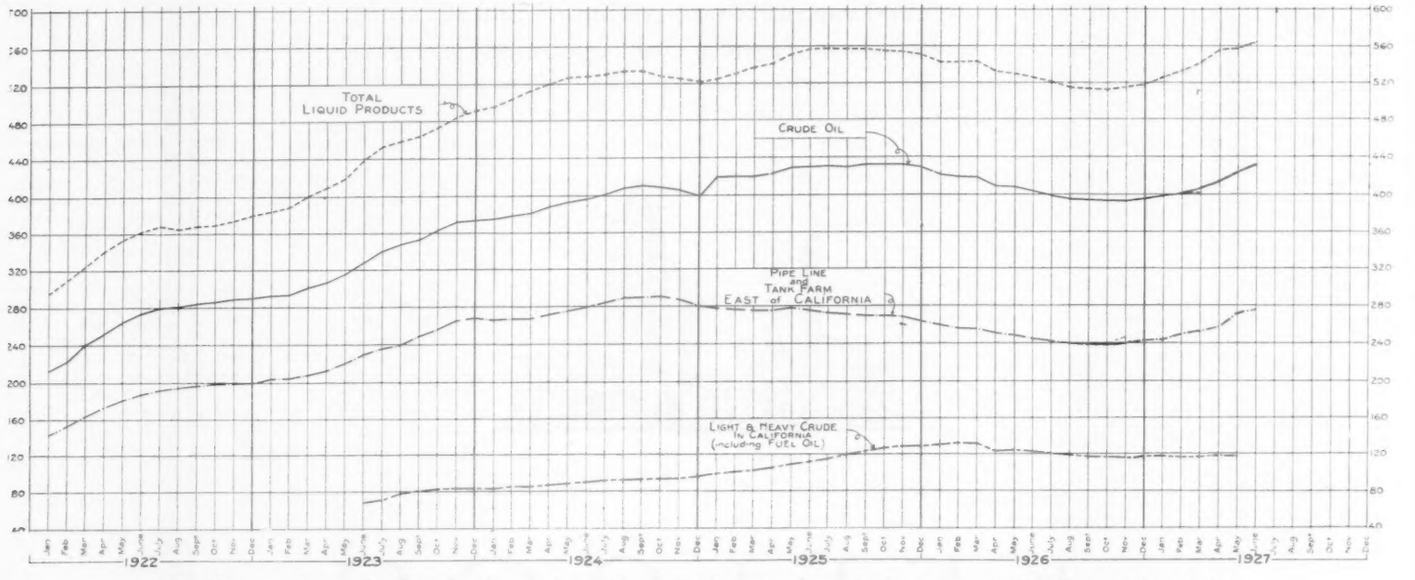
GRAPHIC ANALYSES OF PETROLEUM

BASED ON BUREAU OF MINES REPORTS. INCLUDES JUNE, 1927, FIGURES, WHICH WILL BE FOUND ON PAGE 104

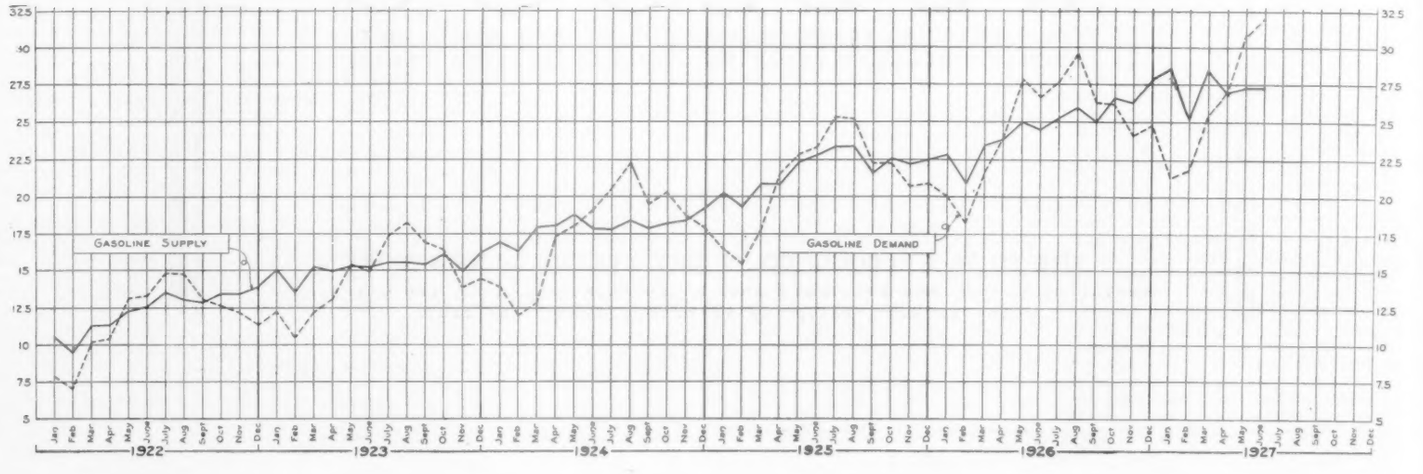
Crude oil imports and exports. (Millions of barrels).



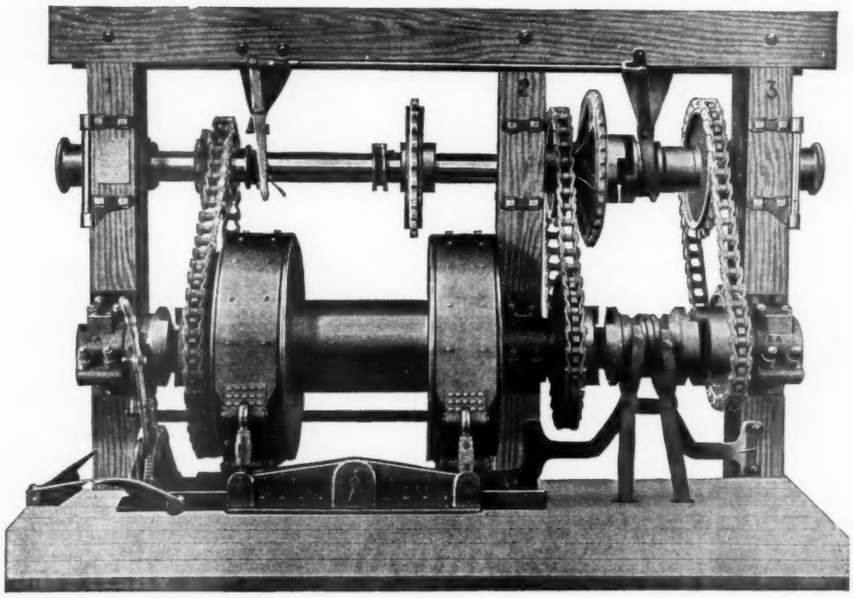
Crude oil stocks. The total liquid stocks given in line "Crude Oil and Refined Products" consists of all crude oil and refined products reduced to barrels. (Millions of barrels).



Gasoline supply (production plus imports) and demand (domestic demand plus exports). (Millions of barrels.)



Gumbo Buster
78A Model Draw Works



Front View Gumbo Buster 78A Draw Works

Having

THREE SPEEDS
Third speed is a time and engine saver.

LINE SHAFT
7 inches in diameter.

DRUM SHAFT
8 inches in diameter.

BRAKE LINING
Solid asbestos 12½ inches wide.

DRUM SPOOL
20 inches in diameter.

POSTS
10″x14″ hardwood.

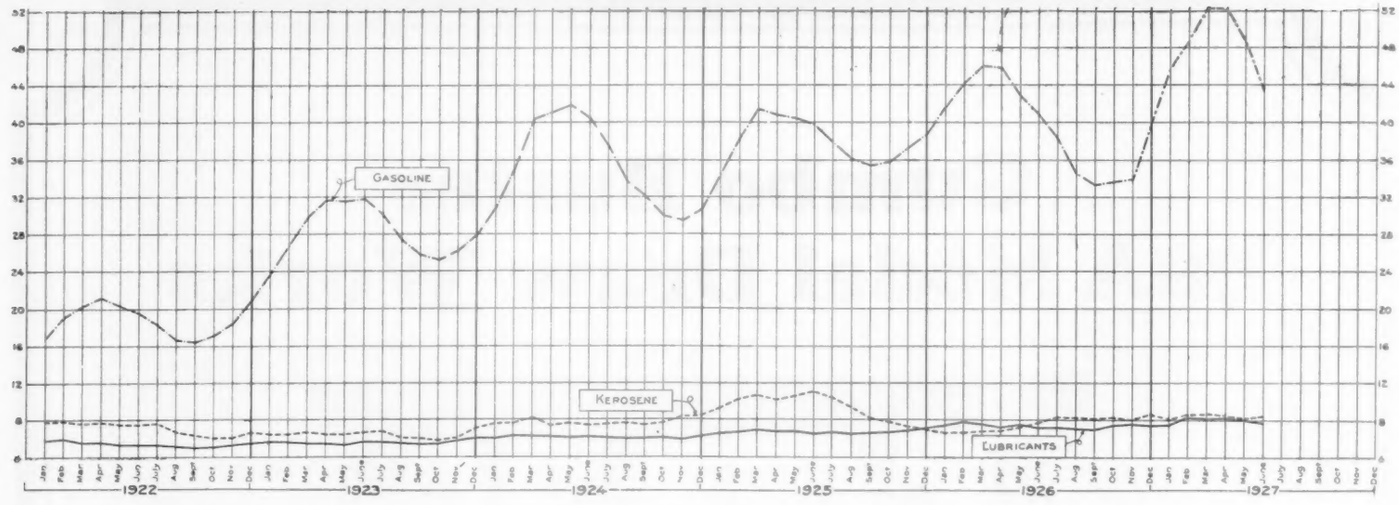
Designed for present and future drilling conditions

Sold Exclusively By

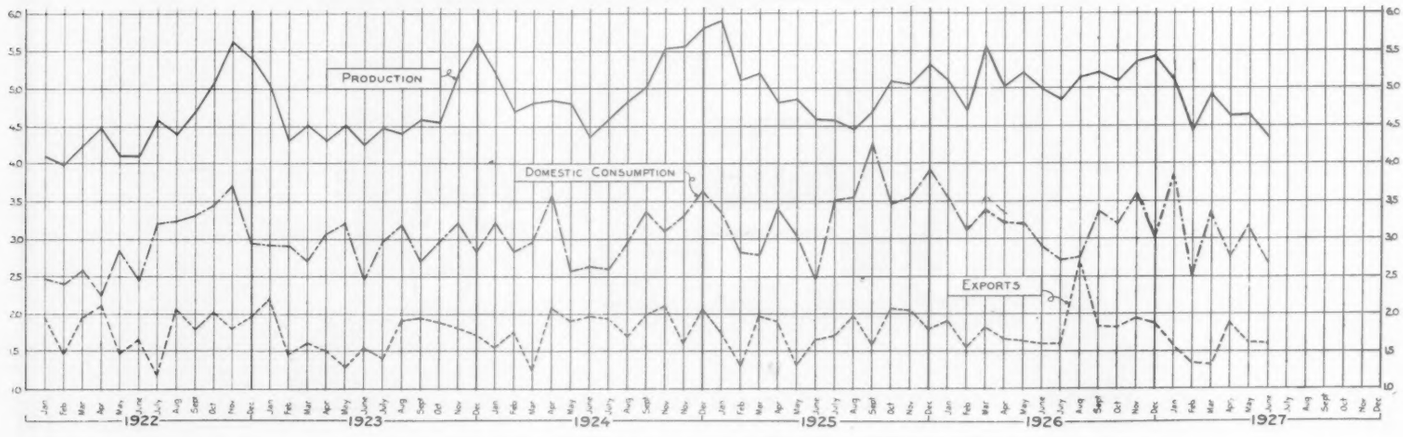
Republic Supply Company

OIL AND GAS WELL SUPPLIES
ROTARY AND CABLE TOOLS

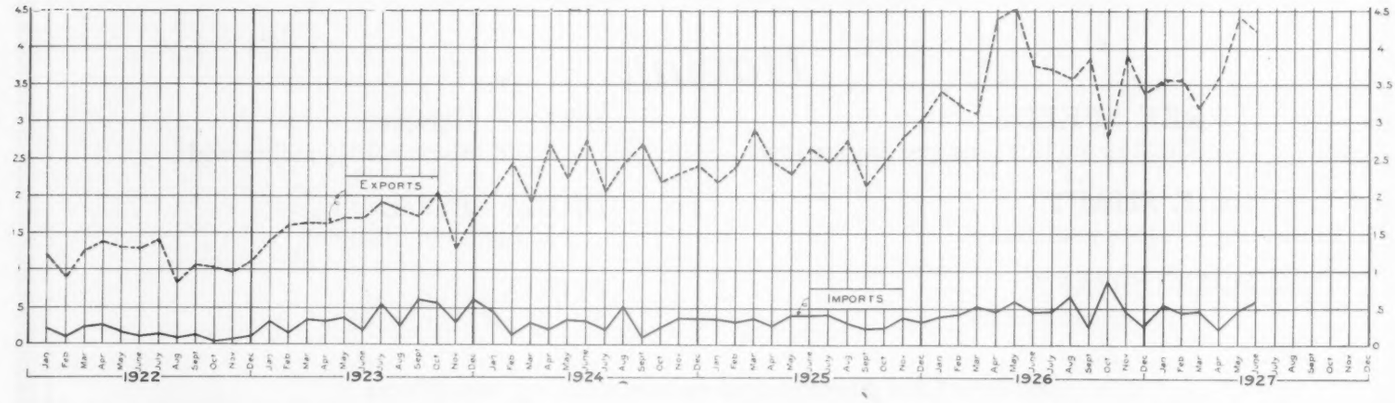
Gasoline, kerosene and lubricating oil stocks. (Millions of barrels).



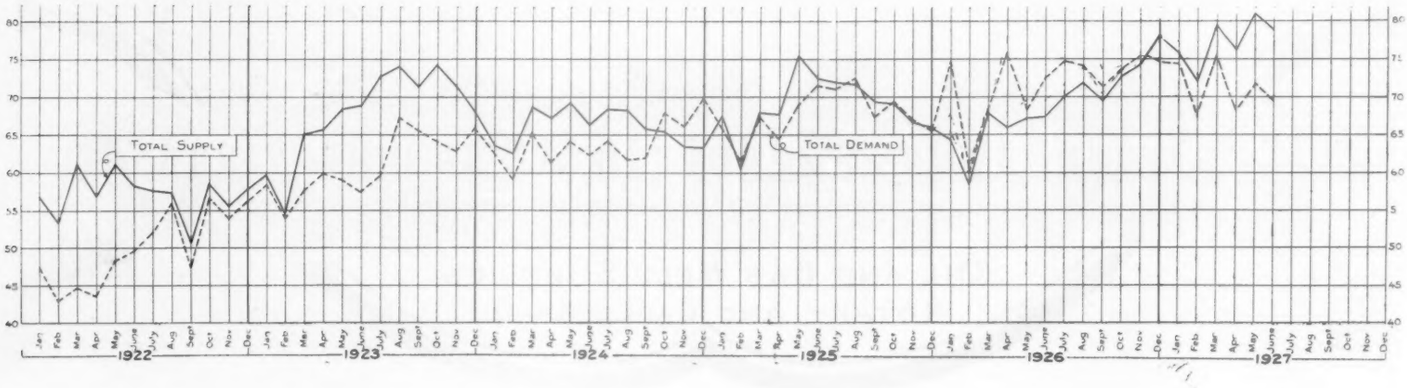
Kerosene production, domestic consumption and exports. (Millions of barrels).



Gasoline imports and exports. (Millions of barrels).



Crude oil supply (production plus imports) and demand (domestic consumption plus exports). Data on demand include California fuel oil starting January 1, 1925. (Millions of barrels).



Steel Plate Construction

Economically and Rapidly Fabricated

Thomas Multiple Punch Press

Towering presses, giant rolls, huge equipment—all the enormous machinery of a modern plant completely equipped to give quantity production of heavy steel plate construction are so placed in the P. I. W. shops as to give high efficiency and low manufacturing costs.

The advantages of this equipment to buyers of steel plate construction are not only the certainty of well made products, but also the assurance of prompt fabrication and rapid delivery.

With the special need of the oil industry for rapid construction, the ability of the P. I. W. shops to meet this demand without sacrificing quality is of prime importance.

P.I.W. STEEL PLATE CONSTRUCTION

1500 Ton Hydraulic Press

Bull Riveter

Branch Plant: Beaumont, Texas

Bending Rolls

THE PETROLEUM IRON WORKS COMPANY

NEW YORK CHICAGO SHARON, PA. HOUSTON TULSA

P.I.W. SERVICE IS WORLD-WIDE

SUPE
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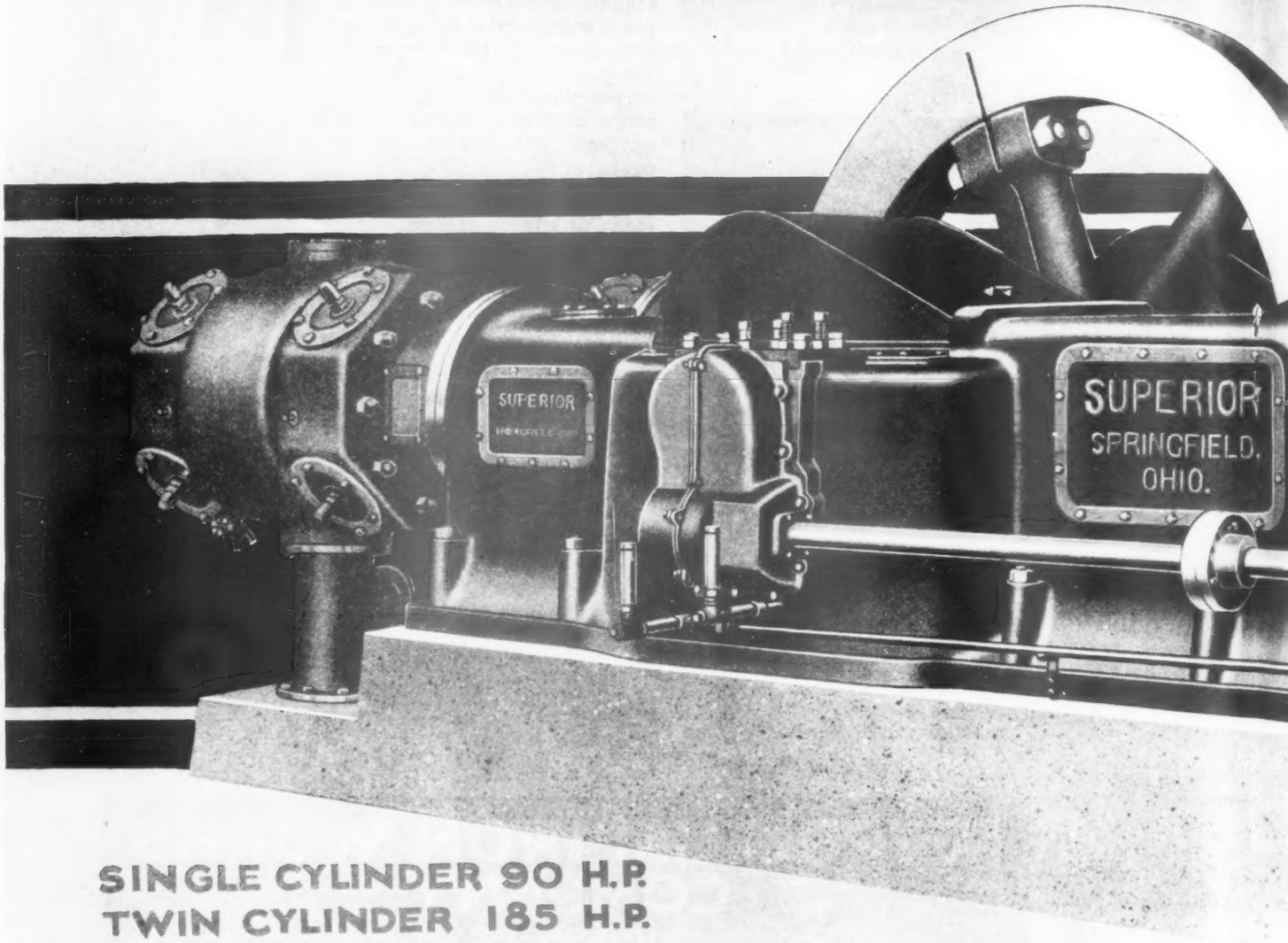
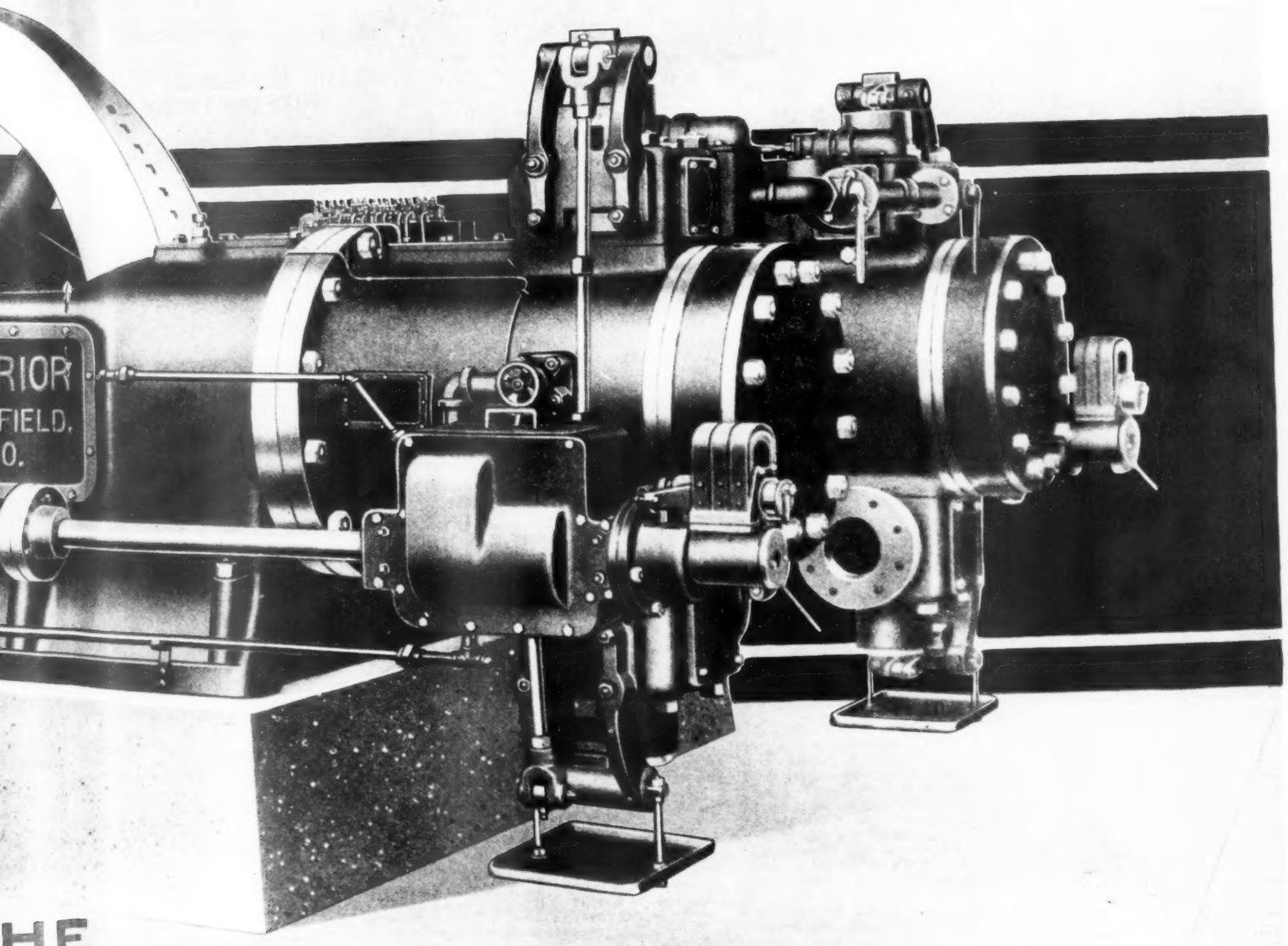
COMPRESSO



SINGLE CYLINDER 90 H.P.
TWIN CYLINDER 185 H.P.

THE
NATIONA
COMPA

ERIOR
NGINE DRIVEN
SOR UNITS



HE
AL SUPPLY
PANIES

MARKETING RUSSIAN OIL AGREEMENT

(Continued from Page 31)

uum renew contracts with Soviet Oil administration covering sale of Russian oil in Far and Near East.

1927—Dutch-Shell launches publicity campaign against Russian oil, including attack against Standard of New York and Vacuum for buying Russian oil.

Soviet Oil Policy

The policy of the Soviet oil trust with regard to oil properties taken over is that former owners can operate them but can never own them, in as much as Soviet does not recognize anything but communistic ownership of property. With regard to marketing, the Soviet policy is to sell products outside of Russia feeling that Russia has ample coal resources for fuel requirements at home. Prior to the World War approximately 90 per cent of Russia's oil production was marketed at home.

The desire of the Soviet oil administration was not to engage directly in marketing abroad, but to sell to other companies, preferably Standard Oil, Dutch-Shell or Anglo-Persian, which had ample facilities to transport and market oil anywhere in the world outside of Russia. In this policy it was slightly balked, however, as a result of the agreement among these three interests in Europe not to handle Russian oil. Hence the agreement between the Soviet and independent marketers in Europe. In the Far East, agreements were concluded with Standard of New York and Vacuum Oil. These agreements were signed by the American companies on the advice of Charles Evans Hughes, former Secretary of State and famous authority on international law.

Soviet Expansion Program

In 1926 The Oil and Gas Journal announced exclusively the latest plans for erpansion of the Russian oil industry on the part of the Soviet oil administration. These plans included building of a new pipe line from Baku to Novorossiysk, on the Black Sea, a big sea-loading terminal at the latter port and construction of a number of oil tankers. The net result would be doubling the facilities for exporting Russian oil products in bulk tankers. These plans have been carried partly to completion.

With regard to the capital for this program, part of it is understood to have been obtained in Germany and part in the United States. The equipment was purchased in Germany, England and the United States. Following the diplomatic break between England and the Soviet, some equipment, which would otherwise have been purchased in England, has been bought in the United States.

The Soviet is understood to have obtained liberal credits, with loans running six months or over. This has excluded many companies from selling to Russia, as credits on equipment usually run from 60 to 90 days.

The Soviet oil program has been financed largely from loans on equipment and from the sale of oil products. As the oil properties were obtained originally without any capital investment, the Soviet has been able to sell its products on a low price basis which would not have to take into consideration the cost of interest on the investment therein. That this is an important item is seen when the capital investment would have to be figured at $100,000,000, and the annual interest requirement at 6 per cent, $6,000,000. Described in more simple terms, Russia, in effect, is selling oil without having to pay dividends to those who placed much of the original investment in the industry.

Geographic Position of Russia

Russian oil, from an exporting viewpoint, is geographically and therefore economically most convenient to the Near East. Turkey adjoins Russia and Egypt and Greece are also within easy reach. The only competitor to Russia in this area is Rumania.

In the Far East Russia it at a disadvantage compared with Persia, India and the Dutch East Indies, because the only outlet is through the Black Sea, Bosphorus, Mediterranean, Gulf of Suez, Red Sea and the Pacific. Nevertheless Russia is nearer the Far East markets than the nearest American fields on the Pacific Coast. Russia is about 4,000 to 6,000 miles distant by tanker, while California is 6,600 to 9,000 miles. Russia is the nearest field of importance able to supply the Far East markets with the exception of Persia, India and the Dutch East Indies. These three latter fields are dominated by the Anglo-Persian Oil Co. and the Dutch-Shell combine. This would probably explain from an economic viewpoint the purchase by American companies of Russian oil for Far East markets.

Big Men in Europe

Walter C. Teagle, president of the Standard Oil Co. of New Jersey, sailed recently for Europe. He has been described as a peace-maker between Standard of New York and Vacuum and the Dutch-Shell combine. He has denied this role. Being aligned definitely with Dutch-Shell in the Russian oil controversy he obviously could not act as a mediator.

John D. Rockefeller, Jr., is also in Europe at the present time on a vacation. The only reason for mentioning this fact is that Ivy Lee, his personal representative, recently visited Russia, and on his return urged in effect a more liberal attitude on the part of American business toward the Russian Soviet. He advocated the establishment in Moscow of a branch of the United States Chamber of Commerce, which suggestion, incidentally, was turned down.

It can be stated in conclusion that every effort will be made by oil men to avert a world-wide oil war which would doubtless be disadvantageous to all concerned. The only suggestion so far advanced, however, which would bring about an end to it is a general agreement covering Europe, the Near East and Far East with relation to handling of Russian oil products. It is considered likely efforts will be made in Europe to bring about such an agreement within the next few weeks.

NEW ZONE BELIEVED FOUND AT SEAL BEACH

(Continued from Page 31)

of production up to the present time, extends in fairly regular continuity from one end of the field to the other. This zone, which is the lower horizon in the older section of the field, was found to be the upper sand in the town lot area when the General Petroleum definitely proved up the existence of the Wasem sand some six weeks ago. Along about this time the Selover zone in the town lot area showed evident symptoms of gas depletion with a resulting drop in crude oil production. As a consequence a number of wells started down in search of the Wasem sand encountered just previous by the General Petroleum. This brings us up to the present time.

Possible New Zone Found

One of these deepening projects was No. 1 Wahl of the Petroleum Securities, which came in last week flowing 240 bbls. of high-grade oil and approximately 8,000,000 feet of gas daily from 5,205 feet. This well has been generally credited as being completed in the same Wasem sand found by the General Petroleum. The writer is inclined to believe, however, that this supposition is erroneous as all evidences tend to indicate that this well has encountered a new hitherto unknown horizon. It may be possible of course that the Wasem zone may be divided into an upper and lower with No. 1 Wahl producing from the latter. The completion depth of this well and gravity of the oil produced, 35.1 degrees, however, points to the existence of a possible new separate horizon. If this supposition turns out to be correct, the third zone will in the future be designated as the Wahl sand. The writer wishes to emphasize the importance of this possible Wahl zone for it, like the Selover, may extend from the farthest west end of the town lot area eastward across the old field, a distance of nearly 2 miles. This condition may not actually exist but it is entirely possible and quite probable if deep drilling in the extreme eastern part of the old field can be correlated with similar work at Alamitos Heights.

Attention is directed in this connection to the wildcatting operations of the Shell company in this area previous to the relinquishment of its holdings and subsequent acquisition and discovery by the Marland Oil Co. The Shell actually had oil around 5,100 feet on the Bryant lease but could not develop commercial production due to inability to overcome water trouble. This early work, however, may be disregarded as the Associated's No. 16 Hellman, a deep test now under way, will serve the same purpose. The Associated's present test, by the way, is still further east than the early wells of the Shell and hence may prove of even more importance. No. 16 Hellman, which was selected some time ago as a pioneer to determine the possibility of deep production on this lease, located in the extreme eastern part of the Seal Beach Field, has definitely cored very promising oil showings between 5,200-90 feet and everything points to a big well upon completion. An exceptionally high gas pressure has also been encountered necessitating the use of heavy mud and hematite to keep the tools in the hole. Some are of the opinion that the showings found in No. 16 Hellman between 5,200-90 feet do not correlate or correspond with the sand found by the Petroleum Securities in No. 1 Wahl approximately 2 miles west in the town lot area and, while this supposition may be correct the fact remains that all evidence available at present points to the existence of a continuous deep zone underlying the Selover and extending from one end of the field to the other.

Town Lot Development

The writer is not advancing any theory in regard to the possible existence of a continuous Wahl sand from one end of the field to the other but is merely calling attention to the extreme importance of such a condition if it should be found to exist. In the older section of the field the Marland, Standard and Associated will naturally conserve their reserves by normal drilling but no one should be misled into believing that operators in the town lot area will follow a similar procedure, in fact it is practically a foregone conclusion that another mad rush will get under way as soon as big production is definitely established by another new well or two. Paul Getty's No. 2 fee was the first large producer to be finished in the deep sand at Alamitos Heights and it is needless to say that this completion has aroused considerable interest among independent operators. Another well like this and producers will cease arguing on the outcome of the recent Dempsey-Sharkey fight or the merits of the present champion. Before bringing this short resume to a close, I would like to suggest that operators watch developments in this field very closely from now on. The situation may not turn out as serious as it looks but all evidence indicates that state production will take another upward turn during the next 90 days. In the event that the deep sand at Seal Beach proves highly prolific conditions may be alleviated somewhat through the inability of some operators in the town lot area to secure maximum production because of the small diameter of the present producers which cannot be deepened advantageously.

Seacliff, in Ventura County, and the Casa Loma district at Bakersfield, in Kern County, have not yet actually been proven up for crude oil production but it seems to be a case of "it won't be long now." Seacliff will in all events be developed slowly and in a normal manner as the potential productive acreage is all held in large blocks but Casa Loma presents a possible town lot threat. Leasing in this subdivided area since the Gulf's well blew in making 8,000,000 feet of gas and traces of oil indicates that 10 or 15 tests will be under way possibly within the next 30 days. Many of the leases negotiated call for drilling within one month after completion of the first commercial producer. This class of work will, of course, be held in abeyance. The Associated has steam up at Potrero and will probably immediately try out its No. 1 Cypress which has been standing cemented in an untested oil sand since last November. The Potrero district, which lies approximately midway between the Rosecrans and Inglewood Fields, has six or eight dry holes already chalked up against it.

The production situation in California as a whole is just simply a case of too much oil in sight. With at least two wildcat areas showing great promise the outlook is not any too bright for another year. Refined oil prices should continue fairly stable due to the things learned in the recent gasoline war. Crude oil prices, on the other hand, may be subject to fluctuations from time to time depending on other existing conditions. It looks like a long dark winter ahead but then these heavy production situations pass over quickly. The fact remains, however, that California will continue to produce in excess of her normal requirements for at least another year necessitating a continuance of intercoastal and export shipments on a broad scale. California's shutin production at the present time aggregates 85,000 bbls. per day and it is quite likely that this will remain undisturbed for some time yet. If Seal Beach comes through with the increase in production expected to result from deep drilling no change in shutin can be anticipated for several months.

DECLINE IN MEXICO HITS THE TREASURY

(Continued from Page 34)

the Mexican press on the oil situation when they connect "the failure of our petroleum policy" with "our sickly treasury."

The press also declared that if Great Britain was to declare a boycott on Russian oil it was the opportunity of Mexico to fill this breach by supplying the fuel to keep up the British Navy. Incidentally, it is the British company in Mexico which is importing Venezuelan oil.

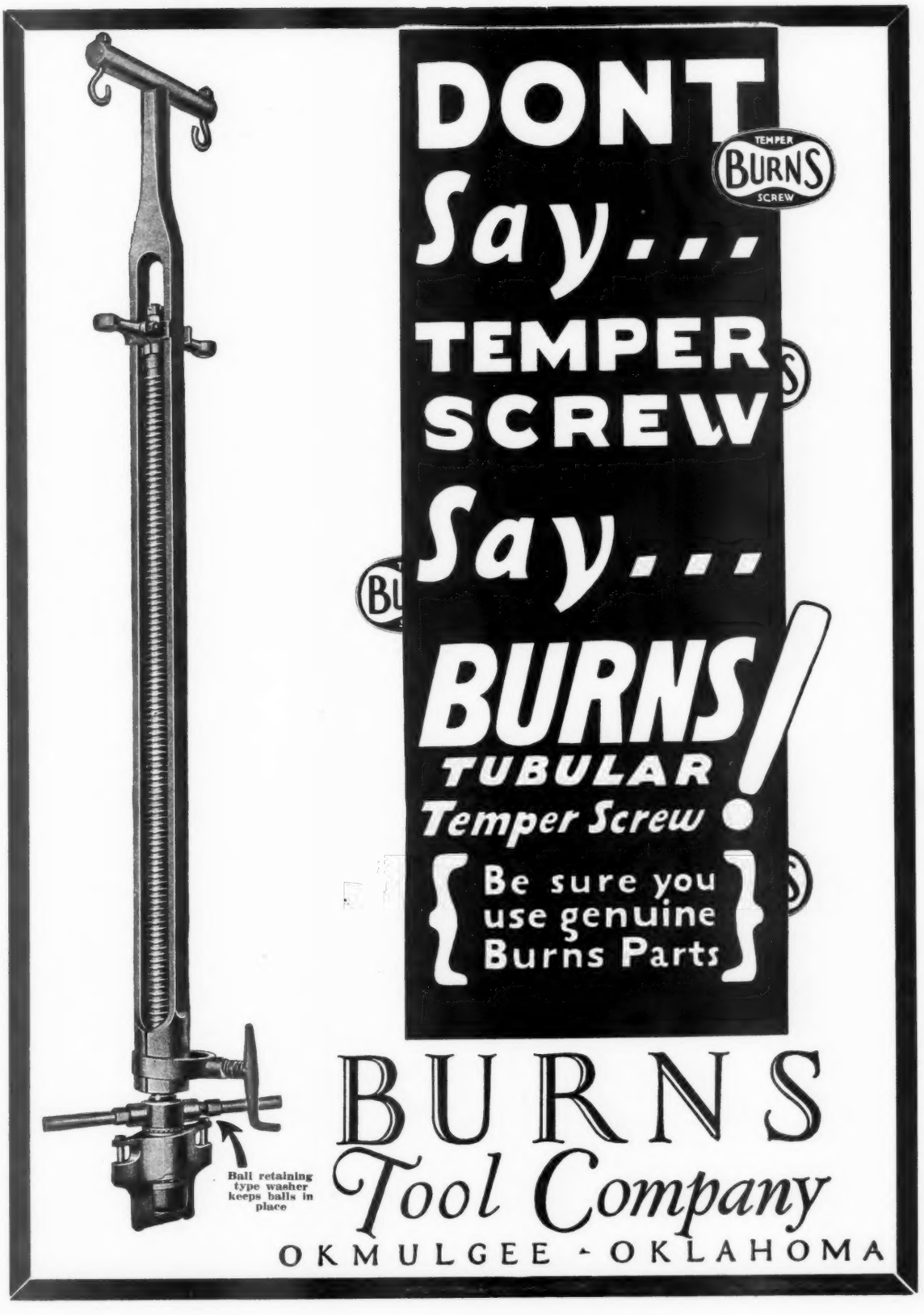
The situation is summed up by the press as follows: "The decrease in oil production, the failure of our oil policy and the failure of Mexico to qualify her petroleum theories are not due to heavy rains, but because the oil companies are not requesting drilling permits because they were denied them by the Department of Industry, Commerce and Labor —denied them because these companies have not complied with our new oil requisities. We do not wish to state whether the oil policy is good or bad. We only speak for results. We could make enormous progress in the petroleum industry, but daily we are going backward."

RULING ON VACANT STRIPS

An oil and gas prospecting permit covering strips of land alleged to lie vacant between two areas embraced in permits and having common boundaries, is denied an applicant in Utah, by the Department of the Interior. The decision says that where, by description by approximate legal subdivisions and as by physical boundary monuments marking the corners of areas embraced in oil prospecting permits on unsurveyed lands, two or more such permits have common boundaries, no application for a similar permit will be allowed to cover narrow strips of land alleged to lie vacant between such permit areas, if the asserted evidence of such strips of vacant land is based on an error in length of the line connecting one area with a public survey corner several miles away.

NEW TEXAS MAPS

WICHITA FALLS, Tex., Aug. 8.—New maps of Brown and Coleman Counties drawn to the scale of 4,000 feet to the inch, showing fee and lease ownerships, development, towns, railroads, highways and streams, are recent editions of the Heydrick Mapping Co., Wichita Falls. Similar maps of Montague County will be released by August 15 and a map of Cooke County containing similar information is being completed.


DONT
TEMPER
BURNS
SCREW
Say...
TEMPER
SCREW
Say...
BURNS!
TUBULAR
Temper Screw
Be sure you use genuine Burns Parts
Ball retaining type washer keeps balls in place
BURNS
Tool Company
OKMULGEE - OKLAHOMA

WILDCAT OPERATIONS IN PANHANDLE

(Continued from Page 40)

GRAY COUNTY

Amogray Oil Co.'s No. 1 A. Chapman, SW NW SW, Sec. 9, Blk. 26, H. & G. N. Sur. — Building rig.

Atlantic O. P. Co.'s No. 1 Combs & Worley, NW cor. NE sec. 39, Blk. 3 — T.D., 3,085 ft; shot 560 qts., 2,947-3,052 ft; sprayed 30 bbls. 24 hrs. and went dead; T.D., 3,165 ft; U.R. 6-in. to cut off water at 3,150 ft.

Archer, Blake et al's No. 1 Turneau, Sec. 111, Blk. 2-B — Spudded and S.D.

Amos et al's No. 1 Crews, NW cor. Sec. 9, Blk. 25 — 4,000,000 ft. gas, 2,270-75 ft; show oil, 2,700 ft; 3,005 ft; 600 ft. oil in hole; S.D. for shot.

Bay Shore Oil Co.'s No. 1 C. W. Bradford, Sec. 143, Blk. 2-B — Killed gas. fish. for bit, 2,668 ft.

British American Oil Co.'s No. 1 J. M. Patton, Sec. 61, Blk. B-2 — Rigged and S.D; temp. abd.

Cole O. & G. Co.'s (was Magdalene Oil Co.'s) No. 1 J. E. Williams, Sec. 17, Blk. 1 — S.D., 3,860 ft.

Danciger et al's No. 1 Jackson, NW cor. Sec. 88, Blk. B-2 — Drlg., 1,200 ft.

Donley Gray Oil Co.'s No. 1 J. W. Gordon, Sec. 79, Blk. 3 — Drlg., 1,005 ft.

Jack Doyle's No. 1 D. W. Osborne, SE cor. Sec. 109, Blk. 3 — Rig.

Edwards et al's No. 1 E. J. Case, NE cor. Sec. 182, Blk. B-2, H. & G. N. Sur. — Drlg., 1,180 ft.

Empire G. & F. Co.'s No. 1 J. E. Cubine, NE cor. NW Sec. 36, Blk. 25 — 6,000,000 ft. gas, 2,342-60 ft; top granite wash, 2,397 ft; set 8-in. pipe, 2,472 ft; drlg., 3,349 ft; 2 bailers water, 3,300-20 ft; 2½ bailers water per hr., 3,505 ft; drlg. ahead.

Empire G. & F. Co.'s No. 1 J. A. Hood, SW cor. SE. Sec. 33, Blk. 3 — Shot with 470 qts., 2,945-3,065 ft; I.P. 635 bbls. first 24 hrs; swabbing and C.O.

Empire G. & F. Co.'s No. 1 J. M. Saunders, SW cor. SE Section 40, Blk. 3 — Shot, 240 qts., 3,050-3,113 ft; bridged and C.O.

Empire G. & F. Co.'s No. 1 J. F. Meers, NE cor. SE Sec. 107, Blk. 3 — T.D., 3,160 ft; steel line meas. show fresh water; swabbed 50% water; swabbed down oil and water gone; drlg., 3,168 ft; 1,000 ft. oil in hole; shot 150 qts. 3,109-68 ft. making 37 bbls. daily; T.D., 3,172 ft.

Empire G. & F. Co.'s No. 1 Webb, SW cor. Sec. 59, Blk. 25; elev. 2,534 ft. — Shot with 180 qts., 2,841-80 ft; show oil, shot with 150 qts., 2,452-55 ft; no results; to complete as gas well; P.B. to 2,400 ft; 4,000,000 ft. gas.

Lefors Pet. Co.'s No. 1 Leach, Lefors Townsite — Spudded and S.D.

Gladis Gray's No. 1 Colebank-Morse (was Foster et al's No. 1 G. Cutebank), SW cor. NE Sec. 65, Blk. 25 — 2,905 ft., T.D; plugged back to 2,803 ft; shot 160 qts., 2,430-2,510 ft; 1,200 ft. oil in hole; bailed dry; shot 600 qts., 2,479-2,525 ft; C.O; swabbing 25 bbls. daily.

Gulf Prod. Co.'s No. 1 Bowers, Sec. 89, Blk. B-2 — Drlg., 2,975 ft; 400 ft. oil in hole at 2,962-68 ft.

Gray County Pet. Co.'s No. 1 Herndon, Sec. 147, Blk. 3 — Hole full salt water, 3,420 ft; S.D., 3,535 ft.

Gray County Pet. Co.'s No. 1 A. Chapman — Topped lime, 2,190 ft; drlg., 2,405 ft.

Neudigate et al's No. 1 A. Chapman, NE cor. E half SE Sec. 52, Blk. 25 — Drlg., 2,665 ft; 500,000 ft. gas, 2,760-65 ft; rainbow of oil, 2,820-25 ft; salt water; S.D. granite wash, 2,827-28 ft, repairing rig.

Operators Oil Co.'s No. 1 Bowers, NE cor., Sec. 85, Blk. 3, I. & G. N. Sur. — Drlg., 230 ft.

Midwest Explth. Co.'s No. 1 J. A. Hood, SE cor. SW, Sec. 33, Blk. 3, I. & G. N. Sur. — Location.

Pampa Oil Co.'s No. 1 W. R. Campbell, Sec. 90, Blk. 3 — S.D., 1,200 ft.

Pampa Pet. Co.'s No. 1 Mary Leopold, Sec. 141, Blk. 3 — Water, 3,230-60 ft; slight oil show in granite wash, 3,572-75 ft; S. D., 3,700 ft.

Petroleum Explth. Co.'s No. 1 L. C. McConnell, SE cor. NW Sec. 174, Blk. 3 — Topped lime, 2,405 ft; S.D., 3,025 ft.

Purple Sage Oil Co.'s No. 1 Johnson, Sec. 8, Rockwell County school land — First oil show, 2,645 ft; water, 2,660 ft; show oil in gran. wash, 2,790-95 ft; 8-in. cas. set., 2,803 ft; show gas, 2,814 ft; S.D., 3,208 ft.

Riley & Heck's No. 1 Mrs. Hopkins, Sec. 66, Blk. 2-B — Show oil, 3,020 ft; dropped 6-in cas. in hole; S.D; will probably skid rig.

Rensoul Pet. Co.'s (was Salisbury & Reynolds') No. 1 M. Huselby, C SE NE NE Sec. 55, Blk. 25, H. & G. N. Sur. — Flow, 20 bbls. daily from granite wash topped, 2,407 ft; drlg. granite wash, 2,845-53 ft with small increase; shot with 400 qts., 2,895-2,780 ft. and to be shot again.

Sullivan et al's No. 1 fee, NW cor. E half SW, Sec. 1, Blk. 1, A. C. H. & B. Sur. — Spud.

J. Williams et al's No. 1 C. W. Bradford, Sec. 123, Blk. B-2 — Rig temp. abd.

HALE COUNTY

Donnell Pet. Co.'s No. 2 Mullican, NW cor. Sec. 66, Blk. A-3, I. & S. B Sur. — S.D., 200 ft.

Donnell Pet. Co.'s No. 1 Mulligan, C Sec. 21, Blk. B, R. M. Thompson Sur. — 200 ft. fluid in hole from 407-14 ft; run. tubing.

Exploration Co.'s No. 1 Crawford, Cen. NE, Sec. 17, Blk. C-3, T. T. R. R. Sur. — Spud and S.D.

Explth. Co.'s No. 1 fee, C SE half Sec. 19, Blk. S-4, D. & S. E. Sur. — Rig; T.A.

Explth. Co.'s No. 1 Goodman — Spudded and S.D.

A. S. Mimm's No. 1 W. A. Ritcher, 700 ft. from east line and 1,200 ft. from south line, Sec. 17, Blk. X, John Glynn Sur. — S.D., 350 ft. for 10-in. casing.

HALL COUNTY

Seifert et al's No. 1 Owens, C NE Sec. 179, Blk. S-5, Dennison & Pacific Sur. — Spudded and S.D.

HANSFORD COUNTY

Oklavania et al's No. 1 Coots, Sec. 13, Blk. 45, H. & T. C. Sur. — S.D., 350 ft.

HOCKLEY COUNTY

World Oil Co.'s No. 1 Ellwood — Rig.

HARTLEY COUNTY

Deep Rock Oil Co.'s No. 1 Lymann & Balfour, Sec. 9, Blk. 2 — Show gas and rainbow of oil, 2,560 ft; top lime, 2,810 ft; 24,000,000 ft. gas, 3,100-3,280 ft; show oil, 3,648-50 ft; 3,653-75 ft. 150 ft. salt water; to drill deeper.

Eslick et al's No. 1 J. B. Irving, Sec. 13, Blk. 13 — Topped granite wash, 3,108 ft; show oil, 3,226 ft; S.D., 3,540 ft.

J. E. McKanna's No. 1 Frances Farwell, Sec. 30, Blk. 22 — Run. 6-in. casing to 2,990 ft.

J. E. McKanna's No. 1 J. M. Shelton est., Sec. 29, Blk. 202 — S.D., 3,595 ft; cas. trouble; rig blown down; rebuilding rig.

HEMPHILL COUNTY

Hoover et al's No. 1 Schaller est., Sec. 4 — Spudded and S.D.

Hoover et al's No. 1 fee, J. S. Hood Sur. — Run. 5-in. cas. to 4,555 ft; S.D., 4,598 ft.

HUTCHINSON COUNTY

Amarillo Oil Co.'s No. 1 Ida Ingerton — 70,000,000 ft. gas, 2,400-2,610 ft; run., 8-in. to 2,665 ft.

Anderson & Pritchard's No. 2 William Yake, SW cor. NW, Sec. 1, Blk. J, H. & G. N. Sur. half mile W of No. 1 — Drlg., 1,260 ft.

R. G. Barnum et al's No. 1 Garland Sanford, Sec. 78, Blk. 46 — Rig.

Beam et al's No. 1 Cockrell, Sec. 3, Blk. 23 — S.D., 405 ft. for orders.

Berryman Oil Co.'s No. 1 Sanford, Sec. 83, Blk. 46, H. & T. C. Sur. — 80,000,000 ft. gas, 2,690-2,905 ft; show oil, 2,915 ft; show oil 3,030-39 ft; C.O., to drill deeper.

Big Coach Oil Co.'s No. 1 Dunnaway, Sec. 5, Blk. Y — S.D., 750 ft.

Conklin et al's No. 1 Johnson, Sec. 1, Blk. X03, H. & O. B Sur. — S.D., 600 ft. for 12-in.

Great Plains Oil Co.'s No. 1 Bivins, Sec. 13, Blk. Y2, T. T. R. R. Sur. — 60,000,000 ft. gas, 2,540-60 ft; S.D., 3,017 ft.

Great Plains Oil Co.'s No. 1 Kingsland, Sec. 4, Blk. Y — S.D., 2,345 ft.

Golden Eagle Oil Corp.'s No. 1 J. Q. Bost, Sec. 6, Blk. Y-2 — Derrick.

McMan O. & G. Co.'s No. 1 Albert Yake — Fish., 1,380 ft.

Marland Oil Co.'s No. 1 Carver, Wm. Heath Sur. — S.D., 3,810-30 ft; 710 ft. water, P.B. to 3,245 ft; testing gas.

Panfield Oil Co.'s No. 1 Luginbyhl Bros., Sec. 50, Blk. M-23 — S.D., 1,200 ft.

Mtn. State Oil Co.'s No. 1 W. B. Haile, Sec. 24, Blk. M-21 — S.D., 3,039 ft.

Phillips Pet. Co.'s No. 12 Elva-Whittenburg, E. Tomlinson Sur. — Set. 5-in. cas., 4,143 ft.

Prairie O. & G. Co.'s No. 1 J. M. Sanford, SW cor. N half Sec. 85, Blk. 46 — Fish., 3,050 ft.

Prairie O. & G. Co. and Vacuum Oil Co.'s No. 1 Cal Merchant — Drowning out 75,000,000 ft. gas, 2,252-2,740 ft; drlg. by tools, 2,550 ft.

Roxana Pet. Corp.'s No. 1 E. Cockrell — 40,000,000 ft. gas, drlg., 2,780 ft.

Skyrocket Oil Co.'s No. 1 Mrs. R. A. Jameson — Drlg. out plug, 2,519 ft.

Sweeney et al's No. 1 Johnson, Sec. 38, Blk. Y — S.D., 1,780 ft.

The Texas Company's No. 1 Ellis Cockrell, Sec. 1, Blk. Y — Drlg., 3,137 ft.

Vitek Oil Co.'s No. 1 W. F. Allen, Jose Rodriguez Sur. — S.D., 180 ft.

KING COUNTY

California Co.'s No. 1 Spikes Farm No. 2 — Show of gas 1,980-90 ft; 6 bailers salt water per hr., 2,085-90 ft; drlg., 2,100 ft.

Gibson & Johnson's No. 1 Burnett est. — Salt water, 2,525-50 ft; run. 8-in. to 2,576 ft; U.R., 2,930 ft.

Humble O. & R. Co.'s No. 1 Pitchfork, Sec. 171, Blk. A-96, John H. Gibson Sur. — Rig.

Midwest's No. 1 Patton — Drlg., 2,900 ft.

J. L. Pattison's No. 1 Patton — S.D., 2,235 ft; slight show gas, 2,115-30 ft.

Sinclair — S.D., 3,146 ft.

White Eagle's No. 1 — S.D., 2,860 ft.

LIPSCOMB COUNTY

Cal-Tex's No. 1 Bradford, C NE NE Sec. 899, Blk. 43, H. & T. C. Sur. — Spudded and S.D.

Camp Creek Oil Co.'s No. 1 Mrs. H. D. May, Sec. 612, Blk. 43 — S.D., 600 ft.

McCorkle's No. 1 A. Barton, NE cor. SW SE, Sec. 504, Blk. 43, H. & T. C. Sur. — Water in lime at 4,126-40 ft; 6-in. set, 4,155 ft; drlg., 4,200 ft.

Ozark Drlg. Co.'s No. 1 Frass, NE SE Sec. 106, Blk. 10, H. & T. C. Sur. — Rig on ground.

Smith, Kinsley & Ruby's No. 1 C. W. Jones, NE cor. SW, Sec. 100, Blk. 43 — S.D., 3,800 ft.

MOORE COUNTY

Amarillo Oil Co.'s No. 2 Terry Thompson, Sec. 19, Blk. 44 — Making 84,000,000 ft. gas; lime, 3,425 ft; gas killed; fish., 3,345 ft.

Douglas Oil Co.'s No. 1 H. M. Beauchamp, Sec. 112, Blk. 44 — 12,000,000 ft. gas, 3,425 ft; 6-in. cas. set, 3,470 ft; water, 4,062-65 ft; S.D. for orders

Moore County Oil Co.'s No. 1 Sneed, Sec. 30, Blk. 6-T — 8,000,000 ft. gas, 2,700-12 ft; drlg., to 2,771 ft, gas increased to 15,000,000 ft; 8-in. pipe set at 2,965 ft; drlg., 3,140 ft.

Shadler Bros.' No. 1 John Lowery, Sec. 237, Blk. 44 — Show gas, 2,500 ft; fish., 2,620 ft.

Skelly Oil Co.'s No. 1 Armstrong & Byrd — 15,000,000 ft. gas, 2,625-2,780 ft; drlg., 3,085 ft.

Prairie and Shamrock's No. 2 Gober, Sec. 16, Blk. M-21 — Fish., 612 ft.

MOTLEY COUNTY

Exploration Co.'s No. 1 Burleson — Spudded and S.D.

Exploration Co.'s No. 1 Tillson — S.D., 750 ft. for repairs.

Exploration Co.'s No. 1 Matador Land & Cattle Co. Cen. SW, Sec. 37, John Gibson Sur. — Spudded and S.D.

Wheeler et al's No. 1 C. D. Bird, C NE Sec. 4, Blk. S, Stephens Sur. — Spudded and S.D.

OCHILTREE COUNTY

W. G. Burton's No. 1 Stickler, Sec. 579, Blk. 43 — U.R., 3,940 ft.

Hamilton et al's No. 1 R. E. Wamble, Sec. 144, Blk. 43 — S.D., 250 ft.

McCorkle Pipe Line Co.'s No. 1 R. H. Moore, Sec. 471, Blk. 43 — S.D., 1,600 ft.

McCorkle's No. 1 Weinett, Sec. 674, Blk. 43 — Fish. for bit, 560 ft.

Standard Dev. Co.'s No. 1 Bowden, Sec. 923, Blk. 43 — S.D., 900 ft.

OLDHAM COUNTY

Prairie O. & G. Co.'s No. 1 Landergin, SE cor. NE SW Sec. 46, League 310, Capital land — Hole full water, 4,085-93 ft; S.D.

PARMER COUNTY

Humble O. & G. Co.'s No. 1 Farwell; elev. 4,005 ft. — Temp. abd., 3,600 ft.

POTTER COUNTY

Amarillo Oil Co.'s No. 1 Masterson, Sec. 69, Blk. O-18, D. & P. Sur. — S.D., 800 ft; casing trouble.

Amarillo Oil Co.s No. 1-B Masterson, Sec. 43, Blk. G-M-3, G. & M. Sur. — Rig.

ROBERTS COUNTY

Big Bend Oil Co.'s No. 1 Mrs. H. Ledrick & Sons, Sec. 7, Blk. 5-A — Show gas, 4,990 ft; show oil, 4,992 ft; cas. set at 4,992 ft; drlg., 5,043 ft.

Dunbar's No. 1 H. A. Gill, Sec. 127, Blk. M-2 — Cellar; temporarily abd.

Murphy et al's No. 1 Gill, Sec. 31, Blk. M-2 — S.D., 650 ft.

Roco Oil Co., formerly Charles Page et al's No. 1 W. T. Hammond, Clay County school lands — Spud. and S.D.

C. C. Wilson, No. 1 A. H. Tandy, NE cor. Sec. 182, Blk. 42, H. & T. C. Sur. — Spudded and S.D.

SHERMAN COUNTY

Gibson Oil Co.'s No. 1 Bivins, Sec. 35, Blk. 3-B — Drlg., 1,735 ft.

Hagy & Harrington's No. 1 S. F. Flores, C SW Sec. 64, Blk. 3-T, T. & N. O. Sur. — Drlg., 1,560 ft.

Phillips Pet. Co.'s No. 1 Price & Fuqua, C NE, Sec. 33, Blk. 2-B, G. H. & H. Sur. — Drlg., 1,035 ft.

Whitehead et al's No. 1 Lee Bivins, C SW Sec. 36, Blk. 2, G. H. & H. Sur. — Location.

SWISHER COUNTY

Explth. Co.'s No. 1 W. C. Denwiddie, Sec. 70, Blk. M-11, A. B. & M. Sur.; elev. 3,610 ft. — Rig on ground.

R. H. Miller's No. 1 Todd — Loc. temporarily abd.

WHEELER COUNTY

Angus et al's No. 1 G. A. Morgan, SW cor. SW NE, Sec. 93, Blk. 17 — Making 10,000,000 ft. gas from lime, 2,040-45 ft; moving boiler back.

Angus et al's No. 1 Vermillion, SW cor. NW SW, Sec. 80, Blk. 17, H. & G. N. Sur. — S.D., 1,622 ft.

Boyles & Johnson's No. 1 S. L. Lewis, Sec. 40, Blk. 24 — S.D., 1,805, corrected depth.

Foster et al's No. 1 S. H. McDonald, SE cor. NW SW, J. N. Lindsay Sur. — Spudded and S.D.

Lyons et al's No. 1 Jackson, Sec. 11, Blk. 27, H. & G. N. Sur. — Drlg., 450 ft. and carrying 10-in.

Marland Oil Co.'s No. 2 W. E. Bentley — Show gas, 2,205 ft; S.D., by agreement.

J. J. Rook's No. 1 M. Mertel, SE NE Sec. 4, Blk. 24, H. & G. N. Sur. — Fish. casing, 1,300 ft.

J. J. Rook's No. 1 C. W. Porter, SW cor. NW Sec. 41, Blk. 24 — Hole full salt water, 2,335-68 ft; to plug.

Wheeler O. & G. Co.'s No. 1 P. J. Sorenson, Sec. 53, Blk A-4 — Spudded and S.D.

Smith Brady et al's No. 1 P. J. Sorenson, Sec. 53, Blk. 4-A — S.D., 2,112 ft. for orders, preparing to resume drilling.

E. L. Woodley, Jr.'s No. 1 Woodley, Sr., Sec. 13, Blk. 5-A — Show oil, 2,227 ft; fish., 2,382 ft.

The Texas Company's No. 1 Bell, Section 71, Blk. 13, H. & G. N. Sur. — Gas, 2,005 ft; swabbed 40 bbls. in 8 hrs. from granite wash, 2,145-55 ft; to drill deeper.

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Ventura Fuel building the la west of Mississippi with C

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+ Avenue Oil Field, - Ventura California +
as viewed from the top of the
McBride - Rogers. Ventura No. 1 rig

B. Isensee. Photo. No. 7.
Ventura California

ENGINES

largest compressor station Cooper Type-19 engines

already contains nine of the 760 B.H.P. units and the tenth unit, making a total of 7600 H.P. will soon be shipped.

This Type-19 engine was designed to be the best gas engine regardless of price that had ever been built. Coopers believe that there were enough gas engine users who would appreciate the longer life and lower operating cost of such an engine to make it a success. The demand has proved sufficient to warrant building them on a production basis and the result is unquestionably the greatest value ever offered in a gas engine driven compressor unit. They are now being built as a single cylinder 200 H.P., single-tandem 380 H.P., twin cylinder 400 H.P. and twin-tandem 760 H.P. unit. Ask for a complete proposal on any compressor problems you may be considering. If the Type-19 doesn't fit it, there is a Cooper unit that will.

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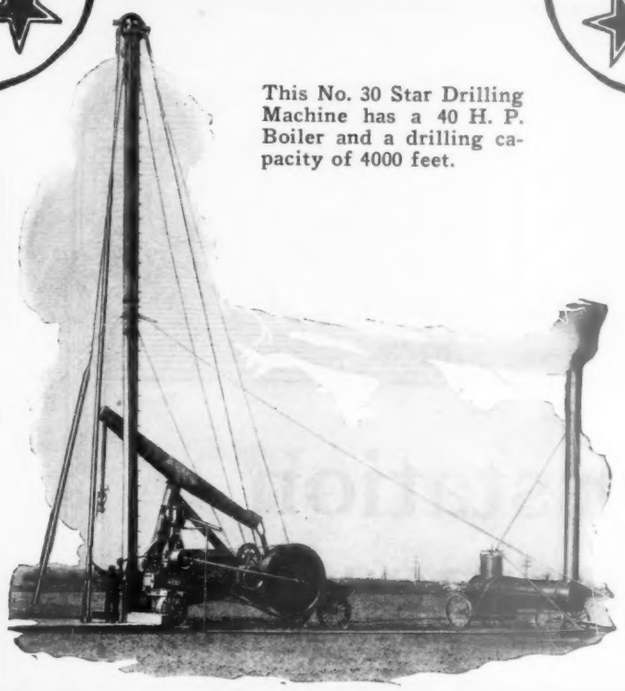

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ROCKY MOUNTAIN AREA

(Continued from Page 77)

in its No. 3 Wilcox last week, abandoned its No. 21 Emmons after striking water. The Magic City Oil Co. reports considerable oil in the hole after a shot and is expected to make a commercial producer.

The Big Eleven Oil Co., which found showings of oil in a well on Conrad Butte early in the summer, will drill two more holes to make a thorough test of the structure.

Field Runs for the Week

Salt Creek	41,410
Teapot	1,330
Big Muddy	2,820
Dutton Creek	40
Grass Creek	2,620
Elk Basin	1,050
Greybull	20
Rock Creek	2,820
Notches	240
Rex Lake	100
Lance Creek	580
LaBarge	360
Poison Spider	1,250
Osage	360
Hamilton Dome	1,090
Mule Creek	850
Lander	680
Byron	50
Lost Soldier	2,770
Simpson Ridge	60
Ferris	60
Cat Creek	2,100
Lake Basin	110
Kevin Sunburst	14,000
Iles Dome	490
Walden	99
Florence	995
Moffat	1,157
Tow Creek	938
Fort Collins	3,280
Boulder	25
Rangeley	100
Hogback	360
Rattlesnake	686
Table Mesa	366
Artesia	1,300
Total	86,566

HENDRICKS POOL IS ALREADY A BIG FIELD

(Continued from Page 29)

to be an anticline as anticipated, with the present producers and drilling wells on its west flank, as shown on the accompanying contour map, there is every reason to believe the east flank will be wider than the west side because normal dip is to the northeast at the rate of about 100 or 125 feet to the mile. The west dip on the top of the lime is 426 feet from the Murchison-Marland test to the Independent Oil & Gas Co.'s No. 1 T. G. Hendricks, a distance of little more than a mile. This is just about opposite to the Church-Fields and Gulf-McElroy Field where the east flank is steep and the western side slopes much more gently.

More Than Lime Structure

That something more than lime structure may account for accumulation in the Hendricks Pool, however, is indicated by the Texon Oil & Land Co.'s test a half mile east of the main pool. It topped the lime higher than any other test with the exception of the Murchison-Marland well and yet at latest report it was drilling at 2,690 feet, or 370 feet in the lime, with no oil. Gulf Production Co.'s No. 1 Hendricks which flowed 2,580 bbls. initially, found the oil just 286 feet below the top of the lime, and Pure Oil Co.'s No. 1 Hendricks, north offset to the Gulf, which flowed 735 bbls. in three hours last week, obtained its big production just 322 feet in the lime, having topped the pay at 2,837-38 feet. The farthest distance any well had to go in the lime prior to the Texon well was independent Oil & Gas Co.'s No. 1 T. G. Hendricks, west of the discovery, which topped the pay at 3,049 feet, or 329 feet in the lime. The Texon well still has plenty of room left, however, before it looks hopeless because at 2,690 feet the bottom of the hole is still 134 feet above sea level whereas the highest point at which production has been found in the seven oil wells was 4 feet below sea level, in the Gulf producer.

Peculiarities of the contours around the six producers in the vicinity of the discovery well led many to believe that a fault existed in that locality. The lime dips 177 feet between the Gulf well and the Independent's small producer a couple of locations westward. Nothing definite is known as to what the condition actually is but several geologists now believe this peculiarity may be due to a local fault which reflects a major fault farther west. It is interesting to note that the two Southern Crude tests north and south of the field show the west side of the structure to be almost straight though, of course, later drilling may entirely alter this.

Rapid Development

Most of the drilling in this field is

(Continued on Page 138)

CALIFORNIA MARKET HAS HEAVY DEMAND

LOS ANGELES, Calif., Aug. 6.—There have been no important developments in the California oil market during the past week. Gasoline continues to move in good volume in the domestic trade due to a very heavy summer demand. Prices remain about the same, though it is reported that among some of the smaller refiners tank wagon prices have softened slightly. Due to price reductions in the East, California gasoline is not expected to move to the Atlantic Seaboard except under contracts which have not yet expired or to companies closely associated with California companies. Prices in California for export gasoline have not dropped to a point where it is profitable to ship to the Atlantic Seaboard at present.

The fuel oil market continues to hold firm. This is true in spite of the fact that the United States Shipping Board did not act on bids which were submitted a couple of weeks ago, preferring to buy on the spot market for the time being and indicating it expected to enter into a contract a few months hence. Shipments of fuel oil have been unusually heavy of late and are holding up very well. Prices vary somewhat in the Los Angeles area due to the necessity of the smaller refiners to sell on the spot market. Among the larger companies, however, prices are being maintained.

Lubricating oils are moving in good volume in sympathy with gasoline sales. In California the bulk of the lubricating oil business is the result of automobile requirements and gasoline and lubricating oils ordinarily move rather closely together. Prices for this commodity continue weak.

NEW PEAK IN REFINERY CRUDE RUNS

(Continued from Page 32)

REFINERY OPERATIONS IN KANSAS
(Plants which have been in operation during the past year.)

Name and Location—	Daily Capacity	Runs August 1	Runs July 1
Arkansas City Refining Co., Arkansas City	8,000	Shut down	Shut down
Barnsdall Refineries, Inc., Wichita	5,000	3,000	3,000
Derby Oil Co., Wichita	5,000	3,500	3,500
Derby Oil Co., Russell	2,500	Shut down	Shut down
Eldorado Refining Co., Eldorado	3,500	2,500	2,000
Golden Rule Refining Co., Wichita	1,000	1,000	1,000
Kanotex Refining Co., Arkansas City	10,000	7,000	7,000
Manhattan Oil Co., Kansas City	7,000	5,000	4,500
Miller Petroleum Co., Humboldt	2,000	Shut down	Shut down
National Refining Co., Coffeyville	6,500	6,400	6,400
Peerless Oil Refining Co., Chanute	3,000	2,000	1,800
Roxana Petroleum Corp., Arkansas City	20,000	18,000	18,000
Sinclair Refining Co., Coffeyville	8,000	9,500	7,500
Sinclair Refining Co., Argentine	8,000	8,000	7,500
Skelly Oil Co., Eldorado	15,000	13,000	12,000
Standard Oil Co. of Kansas, Neodesha	12,000	7,000	6,000
Vickers Petroleum Co., Potwin	3,500	1,800	1,800
White Eagle Oil & Refining Co., Augusta	8,000	8,000	5,500
West Missouri Group—			
Alliance Rubber Producing Co., Centropolis	2,000	Shut down	Shut down
Wilhoit Refining Co., Joplin	1,500	500	800
Total	131,500	96,200	88,300

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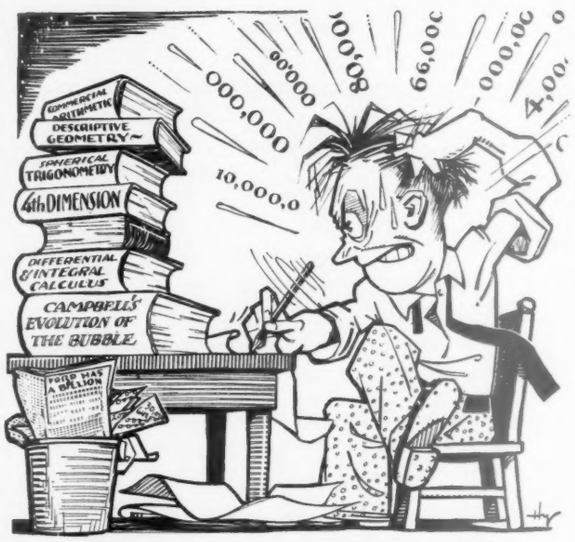

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billions and billions—yes even trillions of tiny bubbles—all working simultaneously—each with its individual film of oil—extracting gasoline from the gas that forms the bubbles! In a Campbell Oil-Froth Absorber all the space is filled with this superabundance of froth.

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CAMPBELL OIL FROTH absorber

REFINERIES OF FOREIGN COUNTRIES

(Continued from Page 78)

by 1.25 francs per 100 kilos for products which had entered the plant to be transformed. In practice, this protection was raised from 2.25 to 3.50 francs. Apparently, the aim of Parliament in voting this law was to facilitate particularly the installation of cracking plants.

This same law afforded a special protection to products obtained from the distillation of schist. These products became exempt from all of the taxes which similar imported products, or those manufactured in France and derived from the refining of petroleum, were required to pay. For example, it was necessary to pay a tax of 33 francs per metric quintal on lubricating oils, while those obtained from the distillation of schist were exempt from this tax. This protection upon the production of carburants and lubricating oil from schist resulted in some expansion of the industry, but the general aim of the law to effect an expansion of the industry for the cracking of petroleum has not been fulfilled.

Of the 10 refineries in France, 4 are situated at Rouen, along the so-called petroleum basin on the left bank of the Seine, 2 at Douai (Nord), 1 at Havre, 2 at Marseille, and 1 in the Department of Herault, at Balaruo-les-Baines. Of these 10, only 1, that Douai, is now being operated. It is stated by authorities in the trade that this is the only refinery in France capable of being economically operated at this time, and this solely by virtue of its location in relation to the normal lines of distribution. This refinery has a capacity of 150,000 tons per year, or approximately 3,000 bbls. per day.

GERMANY

From report by Trade Commissioner William T. Daugherty, Berlin.

As a consequence of a fusion on September 8, 1925, of the three leading local petroleum enterprises, namely, Duetsche Erdoel Aktien-Gesellschaft, Deutsche Petroleum Aktien-Gesellschaft, and Ruetgerswerke Aktien-Gesellschaft, all of Berlin, German petroleum refineries, formerly separately controlled, were assigned to the Deutsche Petroleum Aktien-Gesellschaft. The Deutsche Erdoel Aktien-Gesellschaft and Ruetgerswerke Aktien-Gesellschaft, however, own almost all of the share capital of the Deutsche Petroleum Aktien-Gesellschaft, the Deutsche Erdoel having the majority thereof.

"Depag" (Deutsche Petroleum Aktien-Gesellschaft) operates four refineries in Germany, two of which (Mineraloelwerke Wilhelmsburg an der Elbe and Danubia Aktien-Gesellschaft fur Mineraloelindustrie, Regensburg) have the largest capacities in crude consumption. The Wilhelmsburg refinery has an annual capacity of 60,000 bbls. and the Danubia 50,000. bbls.

In addition to those owned and operated by the "Depag," there are 14 other refineries of importance. These are owned by the following companies and are located as shown below. The capacities given refer to daily crude consumption, in barrels.

	Capacity in barrels
Deutsche Petroleum Aktien-Gesellschaft, at—	
Wilhelmsburg on the Elbe	60,000
Regensburg	50,000
Mannheim-Rheinau	6,000
Hanover-Linden	15,000
Deutsche Gasolin Aktien-Gesellschaft, at—	
Dollbergen	15,000-20,000
Frankfort on the Main	15,000-20,000
Emmerich	(?)
Freiburg	(?)
Vacuum Oil Co., at—	
Schulau	50,000
Oslebschausen	20,000-30,000
Royal Dutch, at Mohnheim	50,000
W. H. Lepenau & Co., at Salzbergen	10,000
Zellner & Gmehlin, at Eislingen	10,000
Julius Schindler Co., at Hamburg	30,000-35,000

Each of the foregoing refineries produces a wide range of petroleum fractions. The equipment of refineries owned by the Deutsche Petroleum Aktien-Gesellschaft, as well as that of the Vacuum Oil Co., at Schulau, are modern. The refineries owned by the Deutsche Gasolin Aktien-Gesellschaft are not all in actual operation.

The following four companies, in contrast to those already listed, refine and blend lubricants only: Mineraloelwerke Albrecht & Co., at Hamburg; Rhenania-Ossag (Royal Dutch), at Hamburg; Mineraloel Import Aktien-Gesellschaft, at Hamburg; Ernst Schleimann's Oelwerke, at Hamburg. One other concern, the Berliner Benzin-Werke, G. m. b. H., at Berlin-Lichtenberg, specializes exclusively in the production of gasoline. The capacities of these five last-mentioned refineries are not known.

GREAT BRITAIN

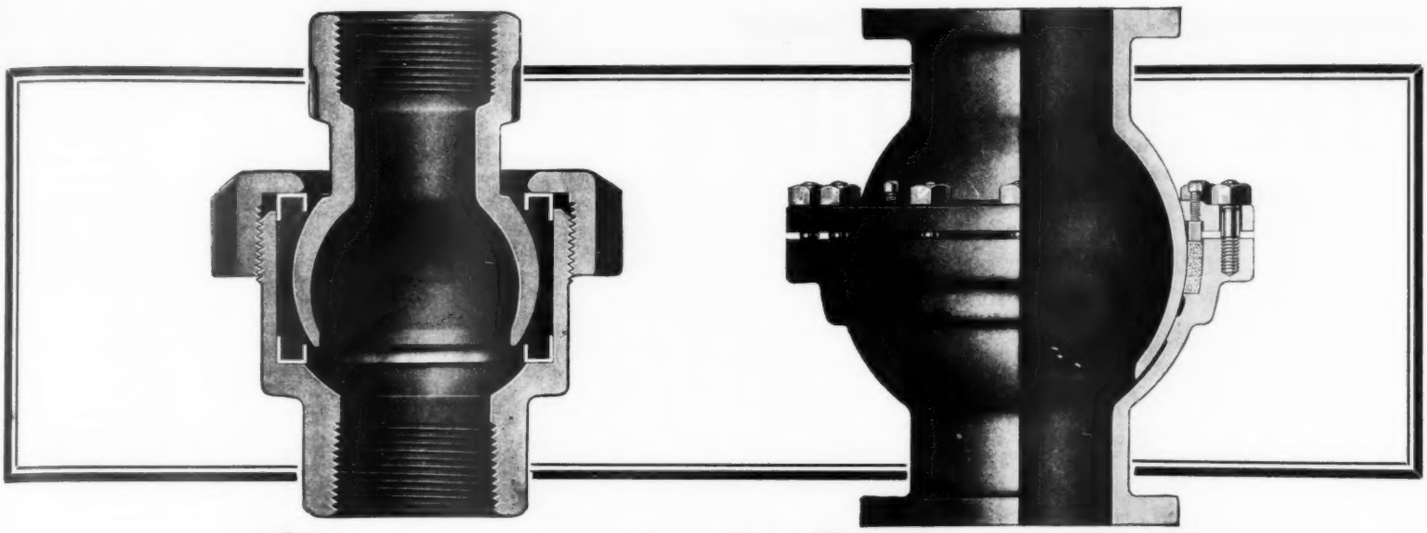
From report by Homer S. Fox, trade commissioner, London

The petroleum refinery industry in Great Britain, with the exception of shale-oil refining, is almost entirely a postwar development, having grown with great rapidity and success. It is already a comparatively large industry, an important factor in national trade, and is growing. One authority has estimated that approximately $100,000,000 has been invested in the industry, exclusive of installations dealing with finished products. A large number of persons have been given regular employment. Some idea of the growth of petroleum refining in Great Britain may be gained by a comparison of the statistics of crure oil imports, there being practically no domestic output of crude oil aside from that obtained by the distillation of shale. In 1913 only 31,700 bbls. of crude oil were imported, while in 1925 the total receipts amounted to 16,046,300 bbls., or more than 500 times the 1913 figure, and imports during 1926 were about the same as in 1925. The principal growth has taken place during the last six years, the first large increase in refining having been in 1921. In 1919 some 215,000 bbls. of crude oil were imported, receipts dropping in 1920 to about 120,000 bbls. but increasing sharply in 1921 to 2,900,000. Since that time there has been a steady and rapid increase, the 1925 figure being more than five times that for 1921.

The growth of the industry may also be shown by the size of the domestic market for petroleum products, which has been supplied by the local refineries. In 1921, the first year of refining on a comparatively large scale, less than 10 per cent of the total domestic consumption of petroleum products (including bunker oil) was supplied by the domestic refineries. In 1925, with an increase in total consumption of about 45 per cent, imports of refined petroleum products had actually declined, and the domestic industry was supplying about 28 per cent of the total demand. Production figures for individual products are not available, but the foregoing figures give some idea of the growth and present position of petroleum refining in Great Britain in its relation to the national consumption of petroleum products. The principal products manufactured thus far have been gasoline and fuel oil, with a fair output of kerosene and some other products. The local manufacture of lubricating oils is still small, but an increase in the domestic supply of these products is to be expected in the near future.

Petroleum refining in the United Kingdom is an outstanding example of the development of the industry in a country having no commercial production of crude petroleum of its own. The United Kingdom is now the world's second largest petroleum-consuming country. In the British industry long-distance transportation of crude oil has been necessary. The bulk of the raw material has come from foreign countries, although chiefly from production under control of British companies. With the rapidly increasing consumption of petroleum products in the United Kingdom, which this year has more than kept pace with the growth in domestic refining facilities, it may be expected that further installations will be made, as well as increases in the capacities of existing plants. In fact, it is reported that additional facilities are actually under consideration.

Not only has the British refining industry supplied a constantly larger por-



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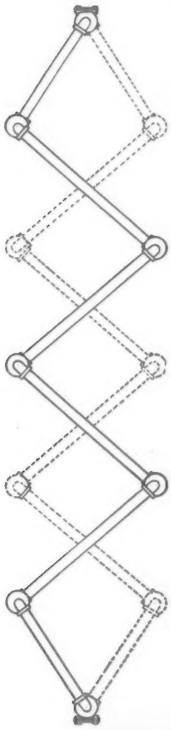

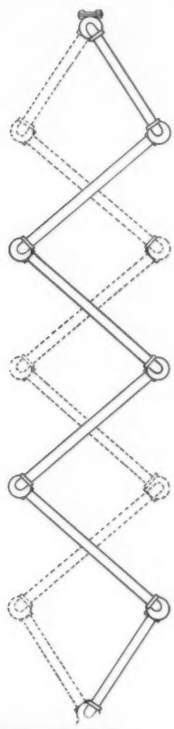

FOR scores of applications where oil, gas, steam, air or other pipe lines must move or stand vibration, Barco flexible joints are in daily service. They are made in all standard sizes from ¼ to 48″ for pressure or vacuum. The design permits both angle and swivel movement by means of a ball joint. The gaskets have demonstrated their long life through years of hard wear.

A Barco flexible joint in a pipe line will often prevent breakage and consequent delay in important operations. Catalog 202 describes the full line of these joints.

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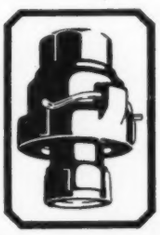

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Keeping down the friction load and reducing friction wear to a minimum, is the problem of every operator of machinery. And there is but one solution to the problem—using the right oil in the right place.

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tion of the national requirements, but increasing quantities have also been available for exports. Exports have not yet reached the point at which their value is equal to that of the crude oil imported, but at least they have enabled the adverse balance of trade in petroleum to be somewhat reduced. Total imports of crude oil in 1925 were valued at approximately $44,000,000, and exports of petroleum products of domestic manufacture were valued at about $25,000,000. In 1921 about 62 per cent of the total domestic petroleum exports were lubricating oils, 16 per cent gasoline and 9 per cent fuel oil. In 1925 the character of the petroleum exports had changed considerably, 50 per cent of the total being fuel oil, 30 per cent gasoline, while lubricating oils, although the quantity had actually increased, amounted to less than 6 per cent of the total. In this connection, it is perhaps interesting to note that paraffin wax is the only petroleum product of which a larger quantity was exported in prewar years than is now being shipped.

The following table gives a comparison of the exports of petroleum products during the last five years:

BRITISH PETROLEUM EXPORTS, 1922 TO 1926

Products—	1922 Imperial gallons	1923 Imperial gallons	1924 Imperial gallons	1925 Imperial gallons	1926, first 9 months Imperial gallons
Kerosene	2,758,911	11,792,403	18,069,158	20,735,940	19,658,038
Gasoline	2,221,289	13,348,273	24,672,214	51,286,620	30,578,444
Other light products	46,733	92,243	421,376	48,270	49,326
Mineral lubricating oil	6,290,386	6,445,263	7,600,279	8,005,390	5,794,905
Mixed lubricating oil	443,839	807,277	1,299,719	1,422,363	1,510,764
Gas oil	88,739	807,760	750,238	2,568,040	2,234,871
Fuel oil	37,960,903	42,930,365	55,889,817	84,235,497	42,590,653
Other mineral oils	66,491	72,223	70,429	133,335	153,897
	Pounds	Pounds	Pounds	Pounds	Pounds
Petroleum jelly	569,968	870,800	1,137,808	1,844,192	(1)
Paraffin wax	15,003,520	19,510,288	24,585,872	28,680,400	13,288,544
Paraffin wax	15,003,520	19,510,228	24,585,872	28,680,400	13,228,544

Note.—The above figures refer to domestic exports only and do not include re-exports.

The oil refineries in the United Kingdom include those equipped to handle crude oil, a number of plants for the refining of shale oil, and numerous smaller installations for the production of special products, such as white spirits, various grades of lubricants, etc. Among the principal refining installations in the United Kingdom are those owned by the Anglo-Persian Oil Co., Ltd., and associated companies, the local Royal Dutch Shell Cos., the Agwi Petroleum Corp., and the London & Thames Oil Wharves, Ltd. There are a number of other smaller plants which run a certain amount of crude oil, at least two separate cracking installations and several shale-oil plants, but the bulk of the crude petroleum treated is handled by the four above named companies or groups of companies.

Crude Oil Refineries

Llandarcy, near Swansea, Wales.—Refinery owned and operated by the Anglo-Persian Oil Co., Ltd., through a subsidiary, the National Oil Refineries, Ltd., Brittanic House, Finsbury Circus, London, E. C. 2. Plant equipment is new and modern, including cracking plant. The source of its crude oil is Persia. Products manufactured are chiefly gasoline (motor spirit), kerosene for lighting and power purposes, and Diesel and fuel oils. Lubricants are now being made on a relatively small scale, and the output of these products is expected to increase. The reported capacity is approximately 15,000,000 bbls. of crude oil per year.

Grangemouth, near Edinburgh, Scotland.—Refinery controlled by Anglo-Persian Oil Co., Ltd., through a subsidiary, Scottish Oils, Ltd., 53 Bothwell Street, Glasgow (London office, Brittanic House, Finsbury Circus, E. C. 2). Plant equipment, modern. Source of crude, chiefly Persia. Products manufactured, chiefly gasoline, kerosene, and fuel oil, although a considerable range of products, including wax, is made. Capacity, 3,000,000 bbls. per year (estimated).

Fawley, near Southampton.—Topping and refining plant owned by Agwi Petroleum Corp., Ltd., 16 Charles Street, Haymarket, London, S. W. 1. Plant equipment modern, including cracking plant. The company has exclusive rights to the Lodge-Tinker process in the United Kingdom. Sources of crude oil include Venezuela, Mexico, and the United States. Products, chiefly gasoline, kerosene, fuel oil, and small output of gas oil. Reported capacity, approximately 2,000,000 bbls. of crude oil per year.

Shell Haven, near London.—Refinery owned by Shell-Mex, Ltd., (Royal Dutch Shell group), St. Helens Court, Great St. Helens, London, E. C. 3. Plant equipment modern, including high vacuum stills and cracking plant. At present, chiefly Venezuelan crude is being treated. Products are gasoline, kerosene, lubricating oils, gas oil, fuel oil, asphalt, and various special products including white spirit, cleaning naphthas, bone degreasing spirits, etc. Capacity, 2,000,000 bbls. per year (estimated).

Stanlow (Ellesmere Port), on Manchester Ship Canal, near Manchester.—Refinery owned by the Shell-Mex., Ltd., (Royal Dutch Shell group). Plant equipment, modern, including cracking plant. Source of crude, various (Venezuelan and Mexican). Products manufactured include gasoline, kerosene, fuel oils, asphalt and special products. Capacity, 500,000 bbls. of crude oil per year (estimated).

Uphall, near Grangemouth, Scotland.—Controlled by Anglo-Persian Oil Co., Ltd., through Scottish Oils, Ltd. (See below under shale-oil plants).

Thames Haven, near London.—Refining plant, consisting of one refinery and two topping plants, owned by London & Thames Haven Oil Wharves, Ltd., 3 St. Helens Place, London, E. C. 3. Plant equipment, mostly new and modern (one old topping plant and one new). Source of crude oil, various. Products manufactured include gasoline, kerosene, and fuel oil. A lubricating plant is also reported to have been recently installed. Capacity, about 5,000,000 bbls. per year (estimated). This refinery is understood to be operated for clients only, no refining being done on its own account.

Hull.—Distilling plant, owned by Major & Co., Ltd. Plant equipment was originally intended for distillation of coal tar, but fair quantities of crude oil are reported to have been treated. Source of crude, various. Products are gasoline, kerosene, gas oil, and fuel oil, chiefly; other products in small quantities. Capacity is small.

Other Refining Plants

Isle of Grain, Kent, at the mouth of the Thames.—Cracking plant, owned by Medway Oil & Storage Co., Ltd. Plant established in 1923; equipment modern. Source of raw material, various, chiefly Russia. Products manufactured are gasoline, fuel oil, and special products, such as white spirit. Capacity is small.

Coryton, near London.—Cracking installation and refining plant, owned by Cory Bros. & Co., Ltd., 59 St. Marys Axe, London, E. C. 3. Plant equipment, modern. Source of raw material, various. Products, gasoline and fuel oil. Capacity, small.

Purfleet, near London. — The Anglo-American Oil Co. has a small plant for the redistillation of lighter products in the manufacture of certain special grades.

Silvertown, near London.—Very small refinery, owned by Silvertown Lubricants, Ltd. This plant is understood to be capable of running crude oil, but actually little or none is treated. Various grades of lubricants are the principal products manufactured.

There are also a number of small plants throughout the country which manufacture special petroleum products, also various tar distillers, such as William Butler & Co., at Bristol. Others treat small quantities of crude oil from time to time and turn out various products. The foregoing plants, however, are under-

3 Years' Service in wells formerly requiring a change every month!

NORRIS BROS., Inc.
Robinson, Ill.

Gentlemen:

I am sending you by parcel post, seven sets of drops and seats. Please regrind the seat. I would like to advise that two sets of these have been in continuous service for three years in wells in which balls and seats would last an average of *one month*.

When returning, I want two long cages, one for standing valve and one for traveling valve.

Please return these to W. E. Lang, Lexington, Ky., parcel post.

Very truly yours,

(Signed) W. E. LANG.

Here indeed is proof extraordinary of the marvelous advantage of the Drop and Seat over the Ball and Seat; *thirty-six months'* operation as against *one month's* operation . . . Figure the saving in pulling costs—the saving in production—the saving in valve check replacement expense; consider our guarantee of *twice* the service of your best ball and seat or money back; then decide if you can reasonably delay a trial of this extraordinary improvement. Full details on request—or, better still, try the Drop and Seat at our risk.

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NO-CO-RO DROP *and* SEAT

The New Day valve check

This is another of a series on specifications—keep for reference in ordering.

BARSCO

Forged Steel
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Here's another BARSCO product that, because of its more modern superior design and *forged steel* [can't break] construction, renders a *longer service - - more economical* because fewer replacements - - approximately *less than one-half the weight* of the ordinary cast iron head.

The *forged steel* from which the head is made has a carbon content of from 50 to 60 points and tensile strength of from 90,000 to 110,000 pounds. Will stand up under the most severe service—*no danger of breakage.*

For working pressures up to 4000 pounds

"Barsco" Forged Steel Braden Heads are provided with an inner thread into which a short piece of casing is screwed. The head is then lowered into position below the derrick floor and set up. Outlets are threaded for 2-inch or 3-inch pipe. These heads are furnished with rubber rings for packing and a split steel ring which can be removed, allowing the couplings to be pulled through head without breaking any connections. Furnished with either solid or split Stuffing Box.

Prices and weights furnished upon application.

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stood to be the chief installations operating at present.

Shale-Oil Refineries

Scottish Oils, Ltd., controlled by the Anglo-Persian Oil Co., Ltd., in addition to refineries located at Uphall and Grangemouth, which refine crude oil as well as shale oil, has four other refineries for refining shale oil only. These plants are located at Pumpherston, Broxburn, Oakbank, and Addiewell, in Scotland. For the production of shale oil the company has retorting plants at 12 localities in Scotland. The plant equipment is modern. The sources of raw material are Scotch shale oil. Products manufactured are gasoline, paraffin, wax, kerosene, and gas and fuel oil, etc., in addition to by-products, such as ammonium sulphate. The capacity of the shale-retorting plants is about 3,000,000 tons of shale per year. The capacity of the refining plants is about 1,000,000 bbls. per year (exclusive of the Grangemouth refinery).

The operations in the shale-oil industry are now considerably curtailed, it being well known that the industry has been operating under great difficulty for some time. There are various reasons for this situation, among them being the comparatively low level of prices of crude petroleum products, which the shale industry has found very difficult to combat. Following the strike, under which operations ceased in November, 1925, the industry has not yet wholly revived, and while the idle mines and plants are being maintained, their early reopening is somewhat doubtful. As for shale operations elsewhere, the extent of further development will doubtless depend to a large extent on the future supply of ordinary well oil.

Throughput and Output

Information furnished to the petroleum department of the Board of Trade by the courtesy of the companies concerned shows that the total output of liquid products from their refineries in Great Britain (including cracking plants, the output from which, however, is relatively small) was 554,000,000 gallons, in addition to certain quantities of asphalt, pitch, and wax. These products were derived from distilling (and to a small extent cracking) 576,000,000 gallons of petroleum, of which approximately 80 per cent was crude oil, about 15 per cent was semirefined oil, and 5 per cent was kerosene, together with 40,000,000 gallons of oil and naphtha obtained by retorting Scottish shale. Detailed figures for 1926, with comparative figures for the preceding year, are shown in the following statement:

(All figures in thousands, that is, 000 omitted)

Statement—	1926 Gallons	1925 Gallons
Throughput:		
Petroleum	576,420	598,090
Shale oil	39,860	50,210
Output:		
Motor spirit	173,340	178,730
Other spirit	14,250	7,590
Kerosene	63,630	75,960
Gas oil	28,790	29,190
Lubricating oil	8,150	6,330
Fuel oil	266,160	307,810
Other liquid products	130	10
Total liquid products	554,450	605,620

Imports and Home Production

Some indication of the extent to which the output of the refineries in Great Britain meets the country's requirements is afforded by the following table which shows for Great Britain and Northern Ireland the import and export trade, the home production, and the balance retained in 1926:

(Quantities shown in thousand gallons)

	Motor spirit	Other spirit	Kerosene	Gas oil	Lubricating oil	Fuel oil
Imports, other than for refining	561,880	2,920	173,420	117,040	91,660	398,910
Re-exports	18,430	40	7,480	1,460	[1]2,530	[1]1,610
Retained imports	543,450	2,880	165,940	115,580	.....	397,300
Home production from imported and native petroleum and from shale	173,340	14,250	63,630	28,790	8,150	266,160
Exports	39,950	60	25,960	2,510	[1]7,640	[1]51,100
Retained home production	133,390	14,190	37,670	26,280	.....	215,060
Total retained	676,840	17,080	203,610	141,860	89,640	[2]359,160
Shipped for the use of steamers engaged in foreign trade	.....	.....	.....	.....	.....	253,200
Total retained in 1925	486,960	13,840	164,840	97,560	82,450	[2]302,250
Bunkers in 1925	.....	.....	.....	.....	.....	252,180

[1]Figures of output of lubricating oil relate to production by refiners of crude petroleum and shale oil and do not include the manufacture of lubricating oils by merely blending or further refining imported lubricants. It is not possible to distinguish the exports of such blends and therefore not possible to state the retained home production.
[2]Excluding fuel oil shipped for the use of steamers engaged in foreign trade.

The Board of Trade Journal of April 7, 1927, has the following pertinent comment to make on mineral oil refining in Great Britain:

Although the refining of oil produced by retorting Scottish shale has been carried on for many years, the refining of crude petroleum (all of which, except a trifling amount from one well in Derbyshire, has to be imported) has only recently become of importance in this country. The growth of the industry in recent years is indicated by the figures of imports of crude petroleum, which from 1,000,000 imperial gallons in 1913, 7,500,000 gallons in 1919, and 4,000,000 gallons in 1920, rose suddenly in 1921 to 101,000,000 gallons (of which 90,000,000 gallons were from Persia) and increased steadily to 569,000,000 gallons in 1925, falling back slightly to 539,000,000 gallons in 1926. Approximately 1½ per cent of the world's production in 1926 was refined in Great Britain. The chief sources of the crude petroleum imported in 1926 were: Persia, 419,000,000 gallons, as compared with 381,000,000 in 1925; Venezuela, 64,000,000 gallons, as compared with 151,000,000 in 1925; Mexico, 38,000,000 gallons, as compared with 27,000,000 in 1925; Colombia, 7,500,000 gallons; and the United States 5,500,000 gallons. British countries (Trinidad and Sarawak) contributed a little over 2,000,000 gallons. These figures do not, however, show the actual throughput of raw material, since the quantities refined in any year are not necessarily the same as the quantities imported in that year, and, apart from oil included in the customs returns as crude, certain other kinds of imported petroleum, mainly kerosene from Rumania and Russia, were treated by refining or cracking.

It will be seen that of the 677,000,000 gallons of motor spirit (petrol) retained in Great Britain and northern Ireland in 1926 for consumption or replenishing stocks, 133,000,000 gallons (or 20 per cent) were manufactured in the country, the corresponding figure for 1925 being 487,000,000 gallons retained, of which 26 per cent was manufactured in the country. As regards kerosene, 204,000,000 gallons were retained in 1926, of which 18 per cent was of home manufacture (as against 165,000,000 gallons retained and 33 per cent home manufacture in 1925). In the case of fuel oil, 359,000,000 gallons were retained in the country and 253,000,000 gallons shipped for the use of steamers engaged in the foreign trade and of this total of 612,000,000 gallons, 35 per cent was home produced, the corresponding proportion in 1925 being 42 per cent.

EASTERN FIELDS

(Continued from Page 60)

to drill a second test on the J. H. Harshbarger farm.

Tyler County

On Sugar Creek, 1½ miles north of Wick post office, Meade district, Tyler County, Albert Neely has completed a test on the E. B. Lee farm. It is a good gas well in the Big Lime formation.

Pleasants County

In Grant district, Pleasants County, E. C. Hartman has drilled old No. 2 on the Hammett heirs' farm down to the Big Injun sand. The well made several flows through the 6-inch casing and shows for a good producer.

In Battelle district, Monogalia County, the Pittsburgh & West Virginia Gas Co.

Users Know the Difference!

Here is what an Expert Finds Out About Reading Casing and Tubing.

605 Nebraska Ave.,
Long Beach, Calif.,
August 5, 1926.

Mr. A. F. McClintock,
826 Van Nuys Bldg.,
Los Angeles, Calif.

Dear Sir:

In regard to the different Reading Iron Co. products used in the wells on the W. R. Ramsey properties, in the Long Beach Field, California, and the reasons for using these products, I will state as follows:

There were fourteen wells drilled in all, and of these thirteen were equipped with Reading tubular goods, 8¼" for water strings, 6¼ and 4½ for oil strings and 2½ and 3" tubing. We felt, that due to the unknown qualities of the surface and deep waters, it would be the best policy to use a material which we knew would resist corrosion to the greatest possible extent. It was for this reason primarily that we deceided on the exclusive use of Reading iron for our water strings and in most cases for our oil strings as well, on account of the ultimate encroachment of edge waters in the oil sands. We found the best kind of workmanship in the couplings and threads, and very few joints had to be laid down.

In the thirteen wells equipped with Reading Casing we did not fail in a single water shut-off and up to the time of Mr. Ramsey's sale of the property, June 1, 1926, we had not had a water string show signs of leaking.

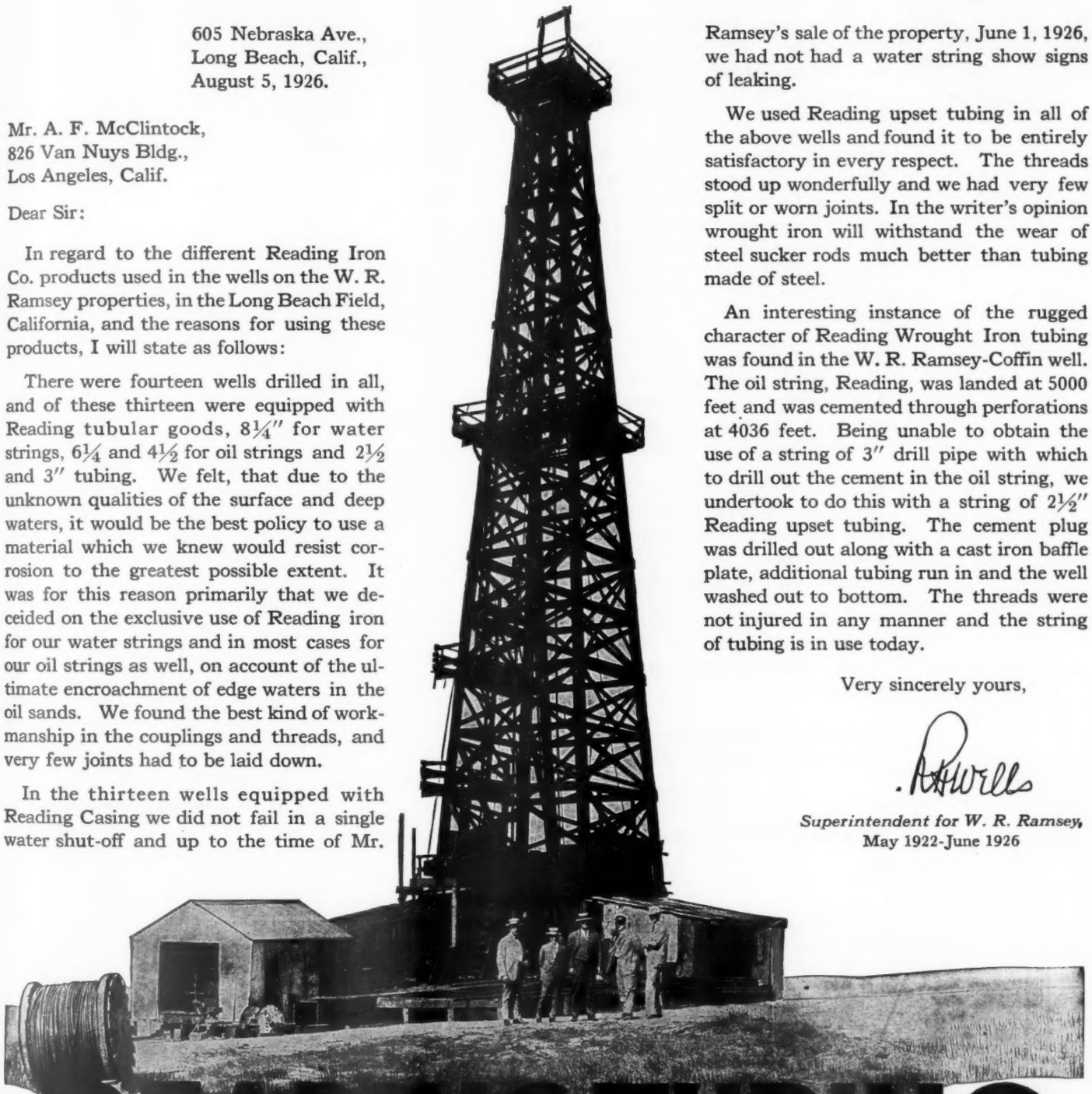
We used Reading upset tubing in all of the above wells and found it to be entirely satisfactory in every respect. The threads stood up wonderfully and we had very few split or worn joints. In the writer's opinion wrought iron will withstand the wear of steel sucker rods much better than tubing made of steel.

An interesting instance of the rugged character of Reading Wrought Iron tubing was found in the W. R. Ramsey-Coffin well. The oil string, Reading, was landed at 5000 feet and was cemented through perforations at 4036 feet. Being unable to obtain the use of a string of 3" drill pipe with which to drill out the cement in the oil string, we undertook to do this with a string of 2½" Reading upset tubing. The cement plug was drilled out along with a cast iron baffle plate, additional tubing run in and the well washed out to bottom. The threads were not injured in any manner and the string of tubing is in use today.

Very sincerely yours,

R. H. Wells

Superintendent for W. R. Ramsey,
May 1922-June 1926



READING TUBING

GENUINE WROUGHT IRON

READING IRON COMPANY HOUSTON, TULSA, SHREVEPORT, LOS ANGELES READING, PENNSYLVANIA

It's all Lubricator

McCord Force Feed Lubricators

There are no frills in a McCord lubricator. Built for oil field use McCord lubricators are made extra strong to stand up under hard service.

McCord lubricators are built like a high grade automobile with all parts of drop forged steel. Numerous inspections in the course of manufacture along with a rigid final inspection insure long and satisfactory service.

Standard of the Oil Fields

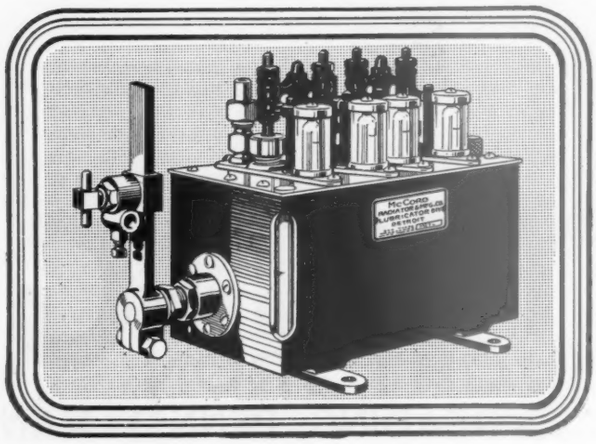
Any pump unit can be removed for inspection or cleaning without disturbing any other unit and the only tool needed is a screw driver.

Is it any wonder no McCord lubricator has ever been known to wear out? That lubricators purchased ten and twelve years ago are still on the job.

Specify McCord lubricators "Standard of the oil fields" on your next engine pump or compressor.

Ask your National Supply salesman for further details.

McCORD RADIATOR & MFG. CO.
Lubricator Division
DETROIT, MICH.



drilled No. 6 on the Moses Bartrug farm into the fourth sand and showed for a good producer. It flowed 100 bbls. the first 24 hours and then declined rapidly and at the present time is doing nothing. In the same district, the Maxon Oil Co. has completed No. 5 on the A. Whistler farm. It is a gasser.

Lincoln County

In Carroll district, Lincoln County, L. R. Sweetland's No. 19 on his own farm is a gasser in the Berea grit. In the same district, the Atlas Gas Co. has a gasser in the same formation at No. 3 on the C. B. Wysong heirs farm.

In Boone County, West Virginia, a number of light gassers have been completed recently. In Crook district, the Owens Bottle & Machine Co. has a gasser at No. 12 on the T. W. Bedford farm. In Scott district, the same company has a gasser at No. 12 on the Cassingham Estate. In the same district, the same company's No. 12 on the Pryor-Allen farm is a gasser. In Washington district, the same company completed a gasser at a test on the B. S. Ballard farm. In the same district, the Hope Natural Gas Co.'s test on the B. R. Vanderlind farm is a fair gasser.

Clay County

In Henry district, Clay County, the South Penn Oil Co. has completed in the Big Injun sand No. 59 on the O. D. Stockley farm. It is estimated it will make a 3-bbl. pumper. The late completions in this district are notably smaller and indicate an approach to the outer edges of the production formation.

In Murphy district, Ritchie County, the Cairo Oil Co. has completed a test on the Jacob Dougherty farm. It is a gasser in the salt sand. In Jefferson district, Pleasants County, Edward Hileman has completed a test on the Howard Pryor farm. It is dry in the Squaw sand and has been abandoned. In the same district, Swingle & Co.'s second test on the Calvin & Robert Templeton farm is a 5-bbl. pumper in the salt sand.

On the waters of Bull River, Sherman district, Calhoun County, the Valley Gas Co. has a 2-bbl. pumper in the Big Injun sand at a test on the Hannah Osborne farm. In the same district, the Sycamore Fuel Co. has a rig up for a test on the R. L. Stump farm. The Calhoun Fuel Oil Co. has a rig up on the L. J. Morris farm. In Lee district, G. L. Cabot has a rig up for a test on the Jemima Price farm.

On Sycamore Creek, Sherman district, Calhoun County, the Hope Construction & Refining Co. has completed in the Maxon sand a test on the E. F. Deweese farm good for 3 bbls. a day.

Wood County

In Walker district, Wood County, the South Penn Oil Co. completed in the Berea grit No. 11 on the George P. Albright farm. It is a very light pumper. The same company is drilling No. 12 on the J. D. Walker farm. In the same district, Dollman & Kingsbury have a 3-bbl. pumper in the Berea grit at No. 3 on the J. R. McCracken farm.

In McClelland district, Doddridge County, A. C. Garner & Co. have completed in the Gordon sand at depth of 2,950 feet, a test on the Thomas Chipps farm. It is showing for a 15 or 20-bbl. pumper and is 3,000 feet in advance of production.

To Drill Deep Test Deeper

In Union district, Harrison County, West Virginia, the Reserve Co. has decided to go back and try to drill its deep test on the Smith Brothers' farm deeper. It will again try to recover the casing which parted when drilling at a depth of 6,820 feet. Once the hole has been cleared it will resume drilling and has no definite depth at which it will stop, barring accidents. Since this well was started two or more years ago many delays on account of fishing jobs have been encountered. In the event no accidents occur it will probably be drilled deeper than any other well.

In Barboursville district, Cabell County, the Pittsburgh & West Virginia Gas Co. has started to drill a test on the T. J. Morris farm. In the same district, Ortman & Shipe have a fishing job for tools on the G. W. Linthum farm. In Duval district, Lincoln County, J. V. Reisman is rigging up on the D. C. Behler farm. In Barboursville district, the Pittsburgh & West Virginia Gas Co. is building a rig on the Andrews Alberts farm.

In Paw Paw district, Marion County, the Owens Bottle & Machine Co. has started to drill on the W. H. Hibbs farm. In the same district, the same company has started to drill on the Harry Tennant farm. In Mannington district, C. L. Norris is due in the sand on the C. D. Arnett farm. In the same district, the Hope Natural Gas Co. is due in the fifth sand on the J. H. Furbee farm. The Clifton Oil & Gas Co. is drilling at 2,600 feet on the Lois Belle Snyder farm. In Battelle district, Monongalia County, the Randall Gas Co. is due in the sand on the Charles Taylor farm. In Clay district, the Dunn Mar Oil Co. is cleaning out to drill deeper its No. 4 on the James M. Tennant farm.

Doddridge County

In southwest district, Doddridge County, the Pittsburgh & West Virginia Gas Co. is building a rig on the James Reed farm and the road completed to a location on the F. H. Wanstreet farm. In Glenville district, Gilmer County, the Sears Oil & Gas Co. is building the rig on the A. B. Campbell farm. In Troy district, the Carnegie Natural Gas Co. has shut down for orders at 2,800 feet on the Cecil McQuain farm.

In Union district, Clay County, the Chalmers Oil & Gas Co. has completed and shot in the Big Injun sand No. 5 on the W. D. Samples farm, good for 10 bbls. a day. On Arden Shoals Creek, same district, 2,500 feet west of the first test on the J. B. Saulsbury farm, a second test has been completed and is a gasser good for 450,000 feet. In the same district, J. C. Smith & Co. are drilling on the J. C. Smith farm.

In New Milton district, Doddridge County, Trainer & Travis have the rig completed for a test on the F. F. Randolph farm. In Grant district, Ritchie County, Charles Ingham and others have started to drill on the Elden Burge heirs' farm. In the same district, Robert Richards is rigging up on the O. C. Thomas farm. In Jefferson district, Pleasants County, the Big Four Drilling Co. has started to drill on the Arle A. Plum farm. In the same district, Samuel Glen & Co. have started to drill on the Margaret Sanderson farm. In Union district, Wood County, Rothwell & Co. are rigging up at a second test on the John Freshwater farm.

In Murphy district, Ritchie County, the Hope Construction & Refining Co. is hauling tools to a location on the J. L. Hill farm. In Courthouse district, Lewis County, the Hope Natural Gas Co. is building a rig on the Clara A. Hill farm. In Freemans Creek district, the same company is drilling to the lower sands a test on the P. R. Woofter farm.

Neither the southeast Ohio nor the southwest Pennsylvania fields reported any completion.

CENTRAL WEST FIELDS

(Continued from Page 58)

Gas Co.'s test, 350 feet from the north line and 1,250 feet from the east line of the J. F. Staats farm, Section 6, came in a duster. Same company made a location for a test 437 feet from the north line and 600 feet from the east line of the Alvin Melton 50 acres, Section 4.

Ashland County

The Ohio Fuel Gas Co. struck a light gas well at a test 300 feet from the south line and 600 feet from the east line of the D. E. Siddle 80 acres, Section 25, Hanover Township, Ashland County, and is drilling a test 660 feet from the south line and 670 feet from the west line of the G. W. Handenschild 51-acre farm, Section 33.

In Clear Creek Township, the Logan Gas Co. has an excellent gas well at a test 750 feet from the north line and 660 feet from the east line of the Andrew Paxton 104 acres, Section 12, and a good gas well at a second test 660 feet from the north line and 680 feet from the east line of the Charles Brown 80-acre farm, Section 12, and has made a location for a test 565 feet from the south line and 875 feet from the east line of the John Shaw 42 acres, same section. S. S. Hulse also drilled in a nice gas well at

GIANT JONES SUCKER RODS

No other rod has the milk bottle cap or the Jones thread protector. Threads made to A. P. I. Standards if desired.

"No matter what thread is used it is only as good as the machine work."

Its In The Coupling

Few makers use the costly steel that we do—Very few do as good an upsetting job as we do.

None make a forged coupling that even approaches the superiority of this Jones Giant—

A better rod—plus absolute thread protection—

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GUARANTEED PERFORMANCE!

"CYCLONE" Hoists and "Matchless" Trolleys stand entirely on their merits. Their *proven performance* makes possible *guaranteed performance.* The following offer is convincing proof that these unbeatable material handlers are built to *deliver the goods!*

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"Cyclone" Hoists and "Matchless" Trolleys are backed by a one-year guarantee against defects in workmanship and material.

Exclusive features of construction place "Cyclone" Hoists and "Matchless" Trolleys in a class by themselves. And that's no idle boast! For instance—

"Cyclone" Hoists have the exclusive *gyrating* principle of operation whereby more than twice the usual number of lift gear teeth are always in mesh. Results? An easier moving, high-speed hoist with a minimum of friction and an exceptionally long life.

"Cyclone" Hoists have the exclusive *single unit principle of construction* which means that sizes are increased by increasing each part, thereby eliminating the objectionable method of obtaining larger sizes by doubling up on smaller sizes. Result? The same simple, compact construction in all capacities of "Cyclone" Hoists.

"Matchless" Trolleys have Flangeless Track Wheels, an exclusive, patented feature. Result? No binding or scraping on edge of beam. Trolley moves freely around curves.

"Matchless" Trolleys have Timken Tapered Roller Bearings which take up all end and radial thrust so apparent in other I-beam trolleys. Result? Friction is minimized and axles and frame are protected from wear.

Every other detail of construction of "Cyclone" Hoists and "Matchless" Trolleys represents the best engineering practice. For complete information get in touch with the "C-M" representative in your territory. If you don't know where to locate him write us direct.

TO THE TRADE

Remember that "C-M" products are safe to sell because they are safe to buy. "C-M" representatives are backed to the limit on sales co-operation. Your inquiry will receive prompt attention and be held in strict confidence. Write.

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Branches: New York—Chicago—Pittsburgh
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CHISHOLM-MOORE
OVERHEAD HOISTS CRANES TROLLEYS TRACK SYSTEMS

a test 400 feet north of the road and 400 feet from the east line of the G. W. Ferguson 20-acre farm, Section 11.

In Green Township, the Logan Gas Co. is drilling a test 900 feet from the south line and 1,000 feet from the east line of the E. A. Beavers 114-acre farm, Section 32, and is also drilling a test 660 feet from the north and east lines of the Joseph R. Craig 90-acre farm, Section 26. Ohio Fuel Gas Co. is drilling a test in the northwest corner of the J. W. Kettering 70 acres, Section 27.

The Logan Gas Co. is drilling a test 500 feet from the south line and 297 feet from the west line of the R. E. Campbell 30 acres, Section 2, Troy Township, same county.

Medina County

M. C. and G. K. Roger drilled a test 850 feet from the north line and 725 feet from the east line of the Irwin J. Snyder farm, Section 36, Lafayette Township, Medina County, getting a good gas well, and is drilling a well on the S. R. Potts 107 acres, Section 9. Ohio Fuel Gas Co.'s test, 300 feet from the north line and 800 feet from the west line of the Earl P. Shaw 52 acres, Section 7, proved a duster. Hawk Gas Co. is drilling a test in the northwest corner of the M. E. Shinn 12 acres, Section 11.

In Brunswick Township, the Logan Gas Co.'s test in the southwest corner of the George and Tine Metzger 77-acre farm, Section 21, came in a dry hole.

In Liverpool Township, the Logan Gas Co. is drilling a test 660 feet from the north line and 609 feet from the west line of the George Deimling 76 acres, Section 1, and is also drilling a test 1,000 feet from the north line and 700 feet from the west line of the F. G. Reusch 86 acres, Section 7.

In Hinckley Township, the Ohio Fuel Gas Co. is drilling a test 400 feet from the north line and 500 feet from the east line of the A. D. Hier 45 acres, Lot 51.

In Medina Township, the Empire Gas & Fuel Co. made a location for a second test in the southwest corner of the C. L. White 47 acres, Lot 37.

Lorain County

The Ohio Fuel Gas Co.'s test, 300 feet from the south line and in the center of the east and west lines of the G. H. Weitzel 49 acres, Lot 16, is an average gas producer.

Hawk and others' test, 600 feet from the south line and 1,300 feet from the east line of the Roy Widdowson 86 acres, Lot 42, Pittsfield Township, is a nice gas well.

Scattered Development

In Chester Township, Wayne County, Glen Harmon and others brought in a good gas well in a test in the southeast corner of the R. C. McFadden 16 acres, Section 8.

In Holmes County, Hardy Township, Empire Gas & Fuel Co. is starting a test 428 feet from the north line and 349 feet from the west line of the Phillips Collier 112-acre farm, Lot 19, also a location for a test 405 feet from the north line and 460 feet from the west line of the William Watts 153 acres, Lot 13. East Ohio Gas Co. made a location for a test 670 feet from the north line and 660 feet from the east line of the D. N. Snow 40 acres, Lot 18. In Prairie Township, he East Ohio Gas Co.'s No. 7 well, 800 feet from the south line and 300 feet from the east line of the A. J. Baker 79-acre farm, is credited with an initial production of 20 bbls. Same company is drilling a test 1,125 feet from the north line and 450 feet from the east line of the J. S. Snyder 43 acres, Lot 14, Richland Township, same county. The Empire Gas & Fuel Co.'s test in the southwest corner of the John Bucklow 23 acres, Section 2, Mechanic Township, same county, was a rank duster.

In Coshocton County Newcastle Township, the Logan Gas Co. made a location for a test in the northwest corner of the Stephen Sells 70 acres, Lot 22.

In the Cleveland Field, Olmstead Township, Cuyahoga County, Hulse and Kundtz have a fine gas well at a second test in the southeast corner of the G. H. Barnum 30 acres, Lot 31.

KENTUCKY-TENNESSEE

(Continued from Page 71)

in a shot, making 150 bbls. the first 24 hours. No. 10 well, 200 feet from the north line and 950 feet from the east line of the Rodney Taylor 58 acres, and between the No. 9 well on the same farm, and the good producers on the Weller farm, only pumped 2 bbls. A string of 618 feet of casing was set, sand struck at from 615-61 feet and drilled to a total depth of 663 feet and shot with 140 quarts. This would indicate that a near dry spot exists between good wells. Same company's No. 8 well, 2,237 feet from the north line and 1,000 feet from the west line of the J. C. Ellis farm, known as the Ellis & Heflin 204 acres, just east of the Weller lease, set a string of 655 feet of casing, found sand at from 655-704 feet and shot with 200 quarts. The well's first 24 hours is credited with a production of 143 bbls., although it is called as a 250-bbl. flowing well.

Ambrose Pool

In the Ambrose Pool, the Creek Drilling Co.'s No. 8 well, 150 feet from the north line and 550 feet from the east line of the Sally Early 112 acres, south of the Weller farm, produced an initial first 24 hours' gauge of 225 bbls. Same company's No. 3 well, 700 feet from the south line and 1,200 feet from the west line of the Fannie Lake 100 acres, north of the Mary Elmore farm, failed to find a pay in the upper sand or the lower Barlow sand at a depth of 793 feet.

The Wood Oil Co.'s No. 11 well, 200 feet from the south line and 1,040 feet from the west line of the Mary J. Elmore 100-acre farm, north of the Rodney Taylor farm, and northwest of the Weller farm, showed an initial production of 200 bbls., with Nos. 12 and 13 drilling.

James C. Ellis drilled in his No. 24 on the James R. Weller 110 acres, being 150 feet from the south line and 580 feet from the east line of the lease, getting the sand at from 585-631 feet and shooting with 120 quarts, the initial production being 100 bbls. Nos. 25 and 26, same farm, are also in the sand and showing equal with other wells on the lease.

Buckner and others' No. 2, in the northeast corner of the E. G. Owen 41 acres, set a string of 735 feet of casing, struck sand from 735-50 feet and drilled to a total depth of 769 feet, shooting with 80 quarts, the well doing 10 bbls. the first 24 hours.

In the vicinity of Dundee, W. P. Evans and others found a dry hole in a test on the St. Clair property.

In the new Sunnydale area, 4 miles or so southeast of the Ambrose Pool, F. D. Stone drilled a dry hole on the Barker farm, and L. C. Young one of the same kind on the Welles farm, near Rough River.

There is no doubt a dry streak passes through the Ambrose Pool. It will be remembered that a few months ago the Ohio Oil Co. offset a good well drilled on the eastern line of the J. R. Weller farm, it being the No. 2 of the Ohio on the west line of the Ellis-Heflin farm, and got a rank duster. The last big well of the Ohio is only 800 feet south of the dry hole, which shows a strip of dry territory passing through the defined limits. Nos. 1 and 2 on the Fannie Lake 100 acres, to the north edge of the pool, were both dry, which makes it more certain that a strip of unproductive territory passes through the pool.

The Rex-Pyramid Oil Co.'s second test on the Ford farm, north of the Ambrose Pool, is reported a dry hole.

The Chicago Petroleum Syndicate's No. 5, on the Crowe 20 acres, is reported showing for 10 bbls.

H. A. Henry's No. 6, on the Nora Chambers 85 acres, has been drilled in and estimated at around 5 bbls. initially.

Daviess County

Southwest of Pellville, in Daviess County, the Leeper Oil Co.'s No. 5 well, 200 feet from the south line and 600 feet from the east line of the John Roby 90 acres, had an initial production of 40 bbls.

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The Pumping Unit for Oil Wells

TO PRODUCE a pumping unit that would surpass anything offered heretofore in reliability, durability, and efficiency—

That was our aim in building the RUF-NEK!

How well we have succeeded, a critical examination of the machine will reveal.

Our experience in the designing and building of machinery—over a period of fifty years—has entered into its construction.

The design incorporates many new and unusual features. It is a versatile machine—designed, built and backed by Link-Belt.

Book No. 780 completely and concisely illustrates and describes the RUF-NEK.

The illustration shows the new Link-Belt RUF-NEK—the Pumping Unit for Oil Wells. This new unit should be of interest to every producer.

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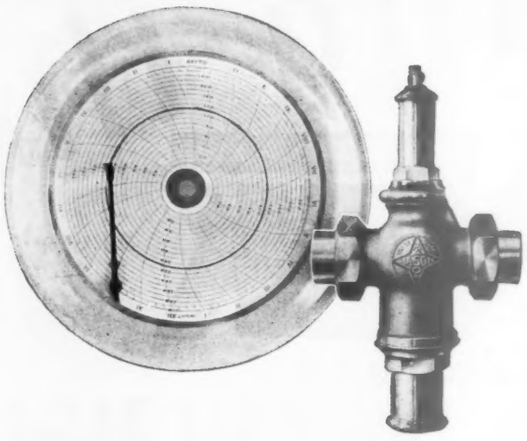

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There's a Mason Regulator for every oil field service,—backed by over 43 years of specialized engineering experience in pressure control engineering.

Mason No. 266
Casing Head Gas Regulator
For vacuum or back pressure regulation up to 30 lbs.

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CRUDE OUTPUT REACHES NEW HIGH; GASOLINE STOCKS REDUCED IN JUNE

Producion at Seminole and Seal Beach, the two most closely watched fields in the country, increased materially in June, 1927, as a result of a greater number of completions. It is noteworthy, however, that the average initial production in the Seminole district declined materially. Production in the Panhandle decreased, the relatively low total initial production being insufficient to counterbalance the natural decline of the field.

Tank farm stocks at Seminole increased approximately 1,500,000 bbls. in June, with little available storage space in sight.

The well record in June showed the largest number of completions at Seminole and Seal Beach yet recorded. The number of wells drilling at the end of the month was less than the previous month in all of the three fields considered.

PRODUCTION AND GRAVITY
(Barrels of 42 U. S. gallons.)

	May, 1927		June, 1927		June, 1926		Average
	Total	Daily Av.	Total	Daily Av.	Total	Daily Av.	Gravity
Seminole	10,499,000	339,000	11,589,000	386,000	*.....	*.....	41.9
Panhandle	4,185,000	135,000	3,800,000	127,000	1,356,000	45,000	36.0
Seal Beach	1,550,000	50,000	1,926,000	64,000	*.....	*.....	24.0

*Undiscovered or undeveloped.

STOCKS AT SEMINOLE
(Barrels of 42 U. S. gallons.)

	May 31, 1927	June 30, 1927	June 30, 1926
Producers' stocks	335,000	285,000	.....
Tank farm stocks	5,386,000	6,813,000	.....
Total Stocks	5,721,000	7,098,000	.....

RECORD OF WELLS, JUNE, 1927
(Barrels of 42 U. S. gallons.)

	Completions			Total Init. Production	Av. Initial Production	Drilling June 30
	Oil	Gas	Dry			
Seminole	94	2	12	154,000	1,600	444
Panhandle	69	2	6	13,000	200	183
Seal Beach	42	..	..	44,000	1,000	69

ANALYSIS OF SUPPLY AND DEMAND OF ALL OILS
(Including wax, coke and asphalt in barrels of 42 U. S. gallons.)

	April, 1927	May, 1927*	June, 1927	June, 1926
SUPPLY:				
Producion:				
Domestic crude petroleum:				
Light	63,227,000	66,901,000	65,335,000	51,065,000
Heavy	9,363,000	9,374,000	9,203,000	10,677,000
Total crude	72,590,000	76,275,000	74,538,000	61,742,000
Natural gas gasoline	3,171,000	3,219,000	3,093,000	2,548,000
Benzol	217,000	221,000	217,000	171,000
Total	75,978,000	79,715,000	77,848,000	64,461,000
Daily average	2,533,000	2,571,000	2,595,000	2,149,000
Excess of daily average domestic production over domestic demand	465,000	456,000	377,000	†44,000
Imports:				
Crude	4,063,000	4,557,000	4,019,000	5,571,000
Refined	1,201,000	1,329,000	1,448,000	2,344,000
Total supply all oils	81,242,000	85,601,000	83,315,000	72,376,000
Daily average	2,708,000	2,761,000	2,777,000	2,413,000
Change in stocks all oils	8,112,000	6,791,000	4,071,000	‡4,589,000
DEMAND:				
Total demand	73,130,000	78,810,000	79,244,000	76,965,000
Daily average	2,438,000	2,542,000	2,641,000	2,566,000
Exports:§				
Crude	1,171,000	1,390,000	1,410,000	1,225,000
Refined	9,917,000	11,863,000	11,305,000	9,959,000
Domestic demand	62,042,000	65,557,000	66,529,000	65,781,000
Daily average	2,068,000	2,115,000	2,218,000	2,193,000
STOCKS (end of month):				
Crude:				
East of California:‖				
Light	251,673,000	259,469,000	268,217,000	222,092,000
Heavy	46,222,000	47,547,000	47,485,000	59,340,000
California:				
Light	29,460,000	27,143,000	26,898,000	35,454,000
Heavy x	88,383,000	90,289,000	90,516,000	87,364,000
Total crude	415,738,000	424,448,000	433,116,000	404,250,000
Natural gas gasoline at plants	757,000	926,000	971,000	650,000
Total refined	136,100,000	134,012,000	129,370,000	122,630,000
Grand total stocks all oils	552,595,000	559,386,000	563,457,000	527,530,000
Bunker oil (included above in domestic demand)	4,204,000	4,250,000	4,244,000	4,038,000

*Revised. †Deficiency. ‡Decrease. §Includes shipments to noncontiguous territories. ‖Exclusive of producers' stocks. xIncludes fuel oil.

PRODUCTION OF CRUDE PETROLEUM, BY FIELDS AND STATES, WITH CLASSIFICATION BY GRAVITY
(Barrels of 42 U. S. gallons.)

	May, 1927*		June, 1927		Jan.-June,	Jan.-June,
FIELD:	Total	Daily Av.	Total	Daily Av.	1927	1926
Appalachian	2,598,000	83,800	2,596,000	86,600	15,031,000	13,864,000
Lima-Indiana	161,000	5,200	171,000	5,700	924,000	1,038,000
Michigan	39,000	1,300	41,000	1,300	216,000	17,000
Ill.-S. W. Ind.	659,000	21,300	661,000	22,000	3,916,000	4,181,000
Mid-Continent	46,329,000	1,494,500	45,175,000	1,505,900	260,338,000	195,070,000
Gulf Coast	4,263,000	137,500	4,163,000	138,800	25,834,000	15,897,000
Rocky Mountain	2,720,000	87,700	2,550,000	85,000	15,582,000	19,044,000
California	19,506,000	629,200	19,181,000	639,300	116,185,000	110,088,000
Total U. S.	76,275,000	2,460,500	74,538,000	2,484,600	438,056,000	359,199,000
STATE:						
Arkansas	3,532,000	113,900	3,328,000	110,900	21,621,000	31,413,000
California	19,506,000	629,200	19,181,000	639,300	116,185,000	110,088,000
Colorado	243,000	7,800	217,000	7,200	1,456,000	1,210,000
Illinois	600,000	19,400	600,000	20,000	3,575,000	3,858,000
Indiana	71,000	2,300	74,000	2,400	411,000	391,000
Southwestern	59,000	1,900	61,000	2,000	341,000	323,000
Northeastern	12,000	400	13,000	400	70,000	68,000
Kansas	3,563,000	114,900	3,432,000	114,400	21,024,000	19,907,000
Kentucky	556,000	17,900	558,000	18,600	3,215,000	3,082,000
Louisiana	1,652,000	53,300	1,652,000	55,100	10,490,000	11,087,000
Gulf Coast	230,000	7,400	230,000	7,700	1,549,000	1,889,000
Rest of State	1,422,000	45,900	1,422,000	47,400	8,941,000	9,198,000
Michigan	39,000	1,300	41,000	1,300	216,000	17,000
Montana	454,000	14,700	474,000	15,800	2,603,000	3,888,000
New Mexico	100,000	3,200	90,000	3,000	744,000	734,000
New York	191,000	6,200	188,000	6,300	1,096,000	927,000
Ohio	670,000	21,600	665,000	22,200	3,833,000	3,628,000
Cent. & East.	521,000	16,800	507,000	16,900	2,949,000	2,658,000
Northwestern	149,000	4,800	158,000	5,300	884,000	970,000
Oklahoma	23,318,000	752,200	23,519,000	784,000	128,956,000	84,986,000
Osage County	2,095,000	67,600	2,025,000	67,500	12,604,000	12,076,000
Rest of State	21,223,000	684,600	21,494,000	716,500	116,352,000	72,910,000
Pennsylvania	813,000	26,200	830,000	27,700	4,745,000	4,280,000
Tennessee	5,000	200	4,000	100	25,000	23,000
Texas	18,527,000	597,700	17,407,000	580,300	104,081,000	63,574,000
Gulf Coast	4,033,000	130,100	3,933,000	131,100	24,285,000	14,008,000
Rest of State	14,494,000	467,600	13,474,000	449,200	79,796,000	49,566,000
West Virginia	512,000	16,500	509,000	17,000	3,001,000	2,894,000
Wyoming	1,923,000	62,000	1,769,000	59,000	10,779,000	13,212,000
Salt Creek	1,340,000	43,200	1,267,000	42,200	7,590,000	9,545,000
Rest of State	583,000	18,800	502,000	16,800	3,189,000	3,667,000
CLASSIFICATION BY GRAVITY (approx.):						
Light crude	66,901,000	2,158,100	65,335,000	2,177,800	381,072,000	294,974,000
Heavy crude	9,374,000	302,400	9,203,000	306,800	56,984,000	64,225,000

*Revised.

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25 years ago Layne & Bowler Company was solving problems for the oil industry that meant greater profit for those using their products and their services.

Today they are still selling products and services to the oil industry that mean more oil and greater profit.

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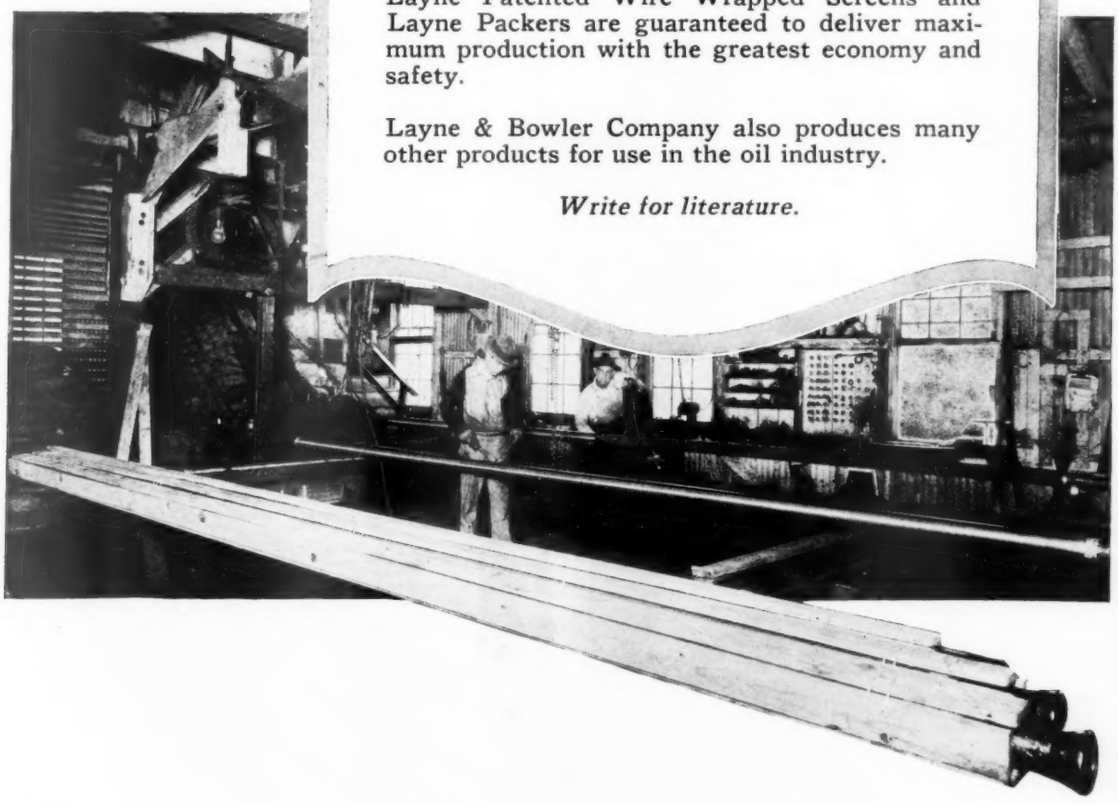

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THE TIMKEN ROLLER BEARING CO., CANTON, OHIO

42"

STOCKS OF CRUDE PETROLEUM HELD IN THE UNITED STATES (BARRELS)

AT REFINERIES (and in coastwise transit thereto.) Reported by location of storage:		May 31, 1927	June 30, 1927	June 30, 1926
Domestic		7,754,000	8,720,000	8,544,000
East Coast:				
Foreign		3,043,000	2,909,000	2,681,000
Appalachian		1,662,000	1,668,000	1,688,000
Indiana, Illinois, etc.		2,465,000	2,507,000	1,919,000
Oklahoma, Kansas, etc.		4,301,000	4,413,000	3,713,000
Texas:				
Inland		1,196,000	1,304,000	1,147,000
Gulf Coast:				
Domestic		8,307,000	*6,961,000	6,736,000
Foreign		304,000	242,000	407,000
Arkansas and Inland Louisiana		420,000	431,000	649,000
Louisiana Gulf Coast:				
Domestic		4,793,000	4,037,000	6,256,000
Foreign		1,072,000	1,282,000	1,464,000
Rocky Mountain		1,181,000	1,293,000	1,538,000
Total east of California		36,498,000	*35,767,000	36,742,000
ELSEWHERE THAN AT REFINERIES:				
Domestic—Reported by field of origin:				
Appalachian:				
N. Y., Pa., W. Va., Eastern and Central Ohio:	Gross	6,975,000	7,009,000	7,222,000
	Net	6,692,000	6,733,000	6,928,000
Kentucky:	Gross	1,413,000	1,468,000	1,845,000
	Net	1,288,000	1,343,000	1,740,000
Lima-Indiana:	Gross	983,000	1,019,000	1,015,000
	Net	771,000	820,000	813,000
Illinois-S. W. Indiana:	Gross	12,214,000	12,198,000	12,334,000
	Net	11,729,000	11,712,000	11,854,000
Mid-Continent:				
Oklahoma, Kansas, Central, North and West Texas:	Gross	188,934,000	197,239,000	148,563,000
	Net	176,827,000	185,376,000	135,739,000
Northern Louisiana and Arkansas:	Gross	30,418,000	30,904,000	42,501,000
	Net	27,752,000	28,191,000	40,238,000
Gulf Coast:	Gross	18,450,000	18,636,000	16,959,000
	Net	18,073,000	18,257,000	16,558,000
Rocky Mountain:	Gross	27,152,000	27,253,000	30,555,000
	Net	27,100,000	27,199,000	30,509,000
TOTAL pipe line and tank farm stocks east of California:	Gross	286,529,000	295,726,000	260,994,000
	Net	270,232,000	279,631,000	244,379,000
Foreign crude petroleum on Atlantic Coast		80,000	67,000	58,000
Foreign crude petroleum on Gulf Coast		206,000	237,000	253,000
		286,000	304,000	311,000
TOTAL refinery, pipe line and tank farm stocks of domestic and foreign crude petroleum east of California		307,016,000	315,702,000	281,432,000
CLASSIFICATION BY GRAVITY (approx.):				
East of California:				
Light crude (24 degrees and above)		259,469,000	268,217,000	222,092,000
Heavy crude (below 24 degrees)		47,547,000	47,485,000	59,340,000
California:				
Light		27,143,000	26,898,000	35,454,000
Heavy (including fuel)		90,289,000	90,516,000	87,384,000

*During June there were approximately 1,300,000 bbls. of crude, previously classified as refinery crude, transferred to pipe line crude stocks.

IMPORTS AND EXPORTS OF CRUDE PETROLEUM (Barrels)

(From Bureau of Foreign and Domestic Commerce)

	May, 1927 Total	May, 1927 Dy. ave.	June, 1927 Total	June, 1927 Dy. ave.	Jan.-June, 1927*	Jan.-June, 1926
ImportsImports	4,557,000	147,000	4,019,000	134,000	25,768	31,626,000
From Mexico	2,749,000	88,700	2,733,000	91,100	12,891	23,706,000
From Venezuela	1,031,000	33,200	896,000	29,900	7,531	5,585,000
From Colombia	625,000	20,200	180,000	6,000	3,676	.....
From other countries	152,000	4,900	210,000	7,000	1,670	2,335,000
Exports	1,390,000	44,800	1,410,000	47,000	7,539	7,573,000
Domestic crude oil:						
To Canada	1,117,000	36,000	1,191,000	39,700	6,223	6,082,000
To other countries	273,000	8,800	219,000	7,300	1,316	1,490,000
Foreign crude oil	.....	.....	.....	.....	.....	1,000

Note—No shipment to territories during June, 1927. *Thousands of barrels.

INDICATED DELIVERIES OF CRUDE PETROLEUM, EXCLUSIVE OF CALIFORNIA GRADES TO DOMESTIC CONSUMERS (Barrels)

	May, 1927* Total	May, 1927* Dy. ave.	June, 1927 Total	June, 1927 Dy. ave.	Jan.-June, 1927	Jan.-June, 1926
Domestic petroleum by fields of origin:						
Appalachian	2,427,000	78,300	2,500,000	83,300	14,746,000	13,689,000
Lima-Indiana	121,000	3,900	122,000	4,100	800,000	1,196,000
Michigan	39,000	1,300	41,000	1,400	216,000	17,000
Illinois and S. W. Indiana	692,000	22,300	678,000	22,600	3,974,000	2,909,000
Mid-Continent	36,483,000	1,176,900	36,187,000	1,206,200	220,464,000	215,034,000
Gulf Coast	4,145,000	133,700	3,979,000	132,600	27,608,000	18,602,000
Rocky Mountain	2,592,000	83,600	2,451,000	81,700	16,425,000	17,530,000
Deliveries and exports	46,499,000	1,500,000	45,958,000	1,531,900	284,233,000	268,977,000
Deliveries	45,428,000	1,465,400	45,068,000	1,502,300	279,451,000	263,990,000
Foreign petroleum	4,719,000	152,200	4,001,000	133,300	26,073,000	31,721,000
Deliveries of domestic and foreign petroleum	50,147,000	1,617,600	49,069,000	1,635,600	305,524,000	295,711,000

*Revised.

COMPARATIVE ANALYSIS (Thousands of barrels of 42 U. S. gallons)

	Production* Total	Production* Dy. av.	Imports‡ Total	Imports‡ Dy. av.	Exports‡ Total	Exports‡ Dy. Av.	Stocks end of period	Domestic demand Total	Domestic demand Dy. av.
Crude petroleum:									
May, 1927	70,148	2,263	4,557	147	1,390	45	†307,016	.....	...
June, 1927	68,022	2,267	4,019	134	1,410	47	†315,702	.....	...
Jan.-June, 1927	407,515	2,251	25,768	142	7,539	42	†315,702	.....	...
June, 1926	65,092	2,170	5,571	186	1,225	41	†281,432	.....	...
Jan.-June, 1926	373,438	2,063	31,626	175	7,573	42	†281,432	.....	...
Gasoline:									
May, 1927	26,787	864	490	16	4,468	144	48,609	26,579	857
June, 1927	26,616	887	590	20	4,248	142	43,768	27,799	927
Jan.-June, 1927	160,850	889	2,886	16	22,650	125	43,768	136,341	753
June, 1926	24,946	832	464	15	3,744	125	40,779	23,803	793
Jan.-June, 1926	142,848	789	2,848	16	22,230	123	40,779	121,562	672
Kerosene:									
May, 1927	4,663	150	1	..	1,633	53	8,568	3,188	103
June, 1927	4,308	144	2	..	1,616	54	8,567	2,695	90
Jan.-June, 1927	27,947	154	8	..	9,476	52	8,567	18,437	102
June, 1926	5,009	167	3	..	1,601	53	7,881	2,908	97
Jan.-June, 1926	30,640	169	10	..	10,308	57	7,881	19,582	180
Lubricants:									
May, 1927	2,625	85	1	—	863	28	8,011	1,928	62
June, 1927	2,571	86	1	..	758	25	7,628	2,197	73
Jan.-June, 1927	15,480	86	232	2	4,763	26	7,628	10,898	60
June, 1926	2,681	89	3	..	984	33	7,314	2,042	68
Jan.-June, 1926	15,978	88	24	..	4,885	27	7,314	11,056	61
Wax (thousands of pounds):									
May, 1927	46,267	1,492	729	24	25,228	814	207,329	25,458	821
June, 1927	44,938	1,498	400	13	24,200	807	198,808	29,659	989
Jan.-June, 1926	295,243	1,631	6,052	33	155,905	861	198,808	131,913	729
June, 1926	50,673	1,689	833	28	27,300	910	155,254	18,348	612
Jan.-June, 1926	321,215	1,775	3,449	19	165,603	915	155,254	120,198	664
Gas Oil and Fuel Oil:									
May, 1927	33,499	1,081	826	27	4,544	147	†26,059	.....	...
June, 1927	31,691	1,056	851	28	4,278	143	†26,590	.....	...
Jan.-June, 1927	192,544	1,064	4,720	26	23,348	129	†26,590	.....	...
June, 1926	29,130	971	1,856	62	3,370	113	†22,554	.....	...
Jan.-June, 1926	174,438	964	7,767	43	19,827	104	†22,554	.....	...

*Figures in this column for crude petroleum are runs to stills. ‡From Bureau of Foreign and Domestic Commerce subject to revision. Exports, except for wax, include shipments to Alaska, Hawaii and P. R. †East of California.

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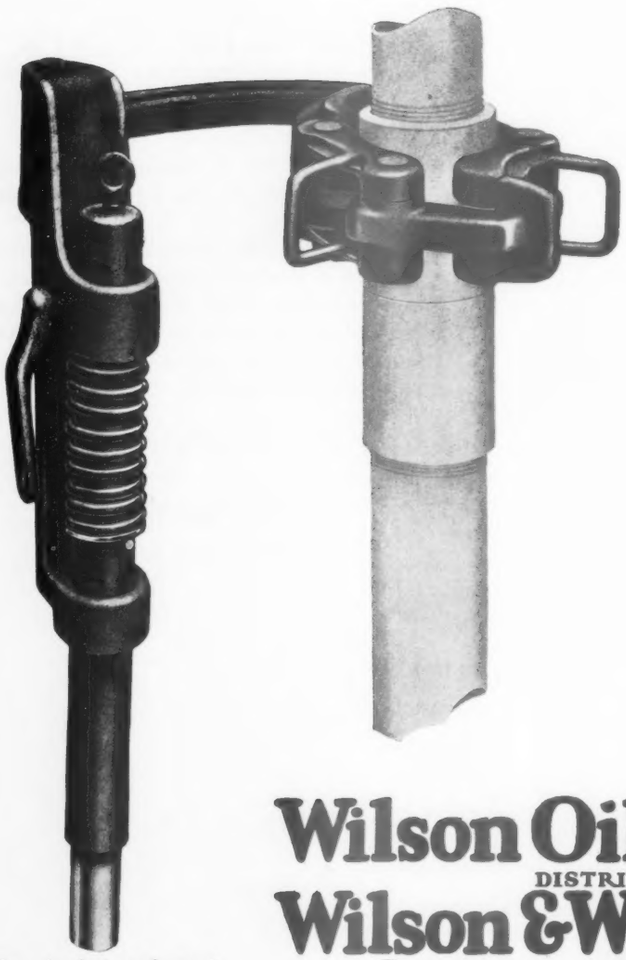

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—to make-up or break-out drill pipe

The Fastest Method of handling pipe

Permits the making-up and breaking-out of pipe with the Rotary Table. This is accomplished with speed and safety. A resilient support for the cage and Tong is provided by an efficient spring so that the Tong is always perfectly balanced. An auxiliary lever on the cage releases the tension when it is desired to release the Tong. The Tong can be swung out from the table when the Elevator is in use, or removed entirely by simply lifting the post from the Rotary Table. The post and lever can be furnished to fit any type of make and break Rotary Table. All sizes of Tong Heads for drill pipe are accommodated in the Tong, as well as casing sizes up to 15½".

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NUMBER OF PRODUCING WELLS COMPLETED*

May, 1927	1,274	January-June, 1927	8,194
June, 1927	1,248	January-June, 1926	8,184

*For states east of California, from The Oil and Gas Journal; for California, from the American Petroleum Institute.

SHIPMENTS OF CALIFORNIA OIL THROUGH PANAMA CANAL TO EASTERN PORTS IN UNITED STATES (Barrels)*

	May, 1927	June, 1927	Jan.-June, 1927	Jan.-June, 1926
Crude oil	1,341,000	1,247,000	4,842,000	7,046,000
Refined products	1,640,000	1,603,000	11,854,000	10,054,000
Gasoline	989,000	1,043,000	5,370,000	3,817,000
Tops	.....	.....	.....	71,000
Gas oil	152,000	236,000	1,946,000	2,600,000
Fuel oil	488,000	255,000	4,394,000	3,356,000
Lubricants	1,000	69,000	144,000	210,000

*Compiled by the San Francisco office of the Bureau of Mines.

RUNS TO STILLS AND OUTPUT OF REFINERIES IN THE UNITED STATES, JUNE, 1927

	Crude oil—Domestic	Crude oil—Foreign	Unfinished oils	Natural—gas gasoline	Total oils run to stills (bbls.)
East Coast	9,095,000	3,020,000	659,000	125,000	12,899,000
Appalachian	2,407,000	.....	110,000	45,000	2,562,000
Indiana, Illinois, etc.	6,629,000	.....	355,000	158,000	7,142,000
Oklahoma, Kansas, etc.	8,457,000	.....	232,000	363,000	9,052,000
Texas	13,526,000	96,000	743,000	354,000	14,719,000
Louisiana and Arkansas	4,969,000	522,000	120,000	387,000	5,998,000
Rocky Mountain	1,998,000	.....	529,000	92,000	2,619,000
California	17,303,000	.....	403,000	466,000	18,172,000
United States total	64,384,000	3,638,000	3,151,000	1,990,000	73,163,000
Daily average, 6/27	2,146,100	121,300	105,000	66,400	2,438,800
Daily average, 5/27	2,152,000	110,800	79,600	74,600	2,417,000
Texas Gulf Coast	10,343,000	96,000	670,000	286,000	11,395,000
Louisiana Gulf Coast	3,259,000	522,000	52,000	316,000	4,149,000

Output and Losses	Gasoline (bbls.)	Kerosene (bbls.)	Gas oil and fuel oils (bbls.)	Lubricants (bbls.)	Wax (lbs.)
East Coast	3,802,000	793,000	5,745,000	770,000	15,678,000
Appalachian	999,000	347,000	589,000	366,000	6,852,000
Indiana, Illinois, etc.	3,716,000	464,000	1,830,000	254,000	6,665,000
Oklahoma, Kansas, etc.	4,492,000	708,000	2,762,000	205,000	4,197,000
Texas	*5,757,000	920,000	5,907,000	676,000	4,945,000
Louisiana and Arkansas	1,844,000	483,000	2,419,000	57,000	3,318,000
Rocky Mountain	1,183,000	159,000	592,000	48,000	3,283,000
California	4,823,000	434,000	11,847,000	195,000	.....
United States total	26,616,000	4,308,000	31,691,000	2,571,000	‡44,938,000
Daily average, 6/27	887,200	143,600	1,056,400	85,700	1,497,900
Daily average, 5/27	864,100	150,400	1,080,600	84,700	1,492,500
Texas Gulf Coast	4,429,000	749,000	4,413,000	641,000	4,713,000
Louisiana Gulf Coast	1,451,000	415,000	1,264,000	57,000	3,318,000

Output and Losses (cont.)—	Coke (tons)	Asphalt (tons)	Other finished products (bbls.)	Unfinished products (bbls.)	Losses (bbls.)
East Coast	13,400	182,600	149,000	63,000	420,000
Appalachian	1,700	1,400	31,000	45,000	144,000
Indiana, Illinois, etc.	25,500	23,500	97,000	220,000	272,000
Oklahoma, Kansas, etc.	21,000	700	61,000	229,000	462,000
Texas	18,400	19,600	11,000	498,000	745,000
Louisiana and Arkansas	12,000	57,500	140,000	525,000	143,000
Rocky Mountain	3,300	4,200	18,000	530,000	33,000
California	.....	47,600	170,000	173,000	268,000
United States total	‡95,300	‡347,100	677,000	2,283,000	2,487,000
Daily average, 6/27	3,180	11,570	22,570	76,100	82,900
Daily average, 5/27	2,840	10,290	19,300	58,400	83,800
Texas Gulf Coast	16,000	19,600	2,000	345,000	621,000
Louisiana Gulf Coast	10,800	56,100	127,000	403,000	63,000

*Correct figures for May, 5,954,000 bbls. ‡Wax, coke and asphalt equivalent to 286.6 pounds per barrel and 5.09 and 5.43 barrels per ton, respectively.

GASOLINE PRODUCTION BY THE VARIOUS METHODS—JUNE, 1927
(Barrels)

	Straight run	%	Cracked	%	Natural-gas gasoline	%	Total
East Coast	2,522,000	66	1,155,000	31	125,000	3	3,802,000
Appalachian	739,000	74	215,000	22	45,000	4	999,000
Indiana, Illinois, etc.	2,013,000	54	1,545,000	42	158,000	4	3,716,000
Oklahoma, Kansas etc.	2,826,000	63	1,303,000	29	363,000	8	4,492,000
Texas	2,891,000	50	2,512,000	44	354,000	6	5,757,000
Louisiana and Arkansas	910,000	49	547,000	30	387,000	21	1,844,000
Rocky Mountain	608,000	51	483,000	41	92,000	8	1,183,000
California	3,835,000	80	197,000	4	*791,000	16	4,823,000
United States total	16,344,000	61	7,957,000	30	2,315,000	9	26,616,000
United States total, 5/27	16,372,000	61	7,714,000	29	2,701,000	10	26,787,000
Gulf Coasts	2,593,000	44	2,686,000	46	601,000	10	5,880,000

*Includes natural-gas gasoline run through pipe lines.

STOCKS HELD BY THE REFINING COMPANIES IN THE UNITED STATES, JUNE 30, 1927

	Gasoline (bbls.)	Kerosene (bbls.)	Gas and Fuel oils (bbls.)	Lubricants (bbls.)
East Coast	8,355,000	1,589,000	7,430,000	2,543,000
Appalachian	932,000	300,000	866,000	986,000
Indiana, Illinois, etc.	4,859,000	721,000	1,273,000	679,000
Oklahoma, Kansas, etc.	3,664,000	533,000	4,667,000	445,000
Texas	6,188,000	1,667,000	8,192,000	1,904,000
Louisiana and Arkansas	2,747,000	1,511,000	3,581,000	110,000
Rocky Mountain	4,495,000	318,000	581,000	127,000
California	12,528,000	1,928,000	.....	834,000
United States total	43,768,000	8,567,000	*26,590,000	7,628,000
United States total, 5/31/27	48,609,000	8,568,000	*26,059,000	8,011,000
Texas Gulf Coast	5,362,000	1,244,000	6,756,000	1,864,000
Louisiana Gulf Coast	2,633,000	1,471,000	2,860,000	110,000

	Wax (lbs.)	Coke (tons)	Asphalt (tons)	Other finished prod's (bbls.)	Unfinished oils (bbls.)
East Coast	93,355,000	28,800	160,300	131,000	5,982,000
Appalachian	22,257,000	500	1,900	97,000	1,187,000
Indiana, Illinois, etc.	18,185,000	12,800	31,300	249,000	3,606,000
Oklahoma, Kansas, etc.	8,734,000	48,500	1,500	271,000	2,543,000
Texas	15,976,000	63,800	8,100	9,000	9,525,000
Louisiana and Arkansas	29,396,000	63,400	22,900	40,000	2,715,000
Rocky Mountain	10,825,000	75,300	10,000	24,000	2,116,000
California	80,000	.....	56,400	359,000	‡10,518,000
United States total	198,808,000	293,100	232,400	1,180,000	38,192,000
United States total, 5/31/27	207,329,000	329,400	222,500	1,368,000	37,760,000
Texas Gulf Coast	15,844,000	57,500	8,100	3,000	8,914,000
Louisiana Gulf Coast	29,396,000	61,600	22,500	33,000	2,344,000

*East of California. ‡Includes 3,234,000 bbls. tops in storage.

Natural-gas Gasoline, June, 1927

The production of natural-gas gasoline in the United States in June, 1927, amounted to 129,900,000 gallons, a daily average of 4,330,000 gallons. This represents another falling off in daily average production, although the decline was less marked than in May. Increased daily output in the Oklahoma-Kansas district again prevented a very material decline in production. In both the Appalachian and Indiana-Illinois districts production of natural-gas gasoline in June, 1927, was the

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same as in June, 1926. Stocks of raw natural-gas gasoline at the plants continued to increase, and eclipsed the 40,000,000-gallon mark for the first time.

(Thousands of gallons)

	Natural-gas gasoline: Production*			Natural-gas gasoline: Stocks end of		Blend. motor fuel—		
District—	May, 1927	June, 1927	June, 1926	May, 1927	June, 1927	(1)	(2)	(3)
Appalachian	7,200	5,800	5,800	4,991	3,883	174	163	307
Indiana, Illinois, etc.	1,200	1,100	1,100	633	502	41	5	16
Oklahoma, Kansas, etc.	47,700	47,200	41,100	17,437	19,041	2,236	3,552	1,130
Texas	26,700	25,400	17,700	11,716	13,877	492	793	99
Louisiana and Arkansas	7,300	6,800	6,200	2,186	1,702	245	271	190
Rocky Mountain	4,100	4,200	3,800	524	553	84	32	141
Total east of California	94,200	90,500	75,700	37,487	39,558	3,272	4,816	1,834
California	41,000	39,400	31,300	1,409	1,209	Not Available		1
Total United States	135,200	129,900	107,000	38,896	40,767	....	....	1,835
Daily average	4,360	4,330	3,570	....	....	....	....	....

(1) Natural-gas gasoline used. (2) Naphtha or other oils used. (3) Stocks end of month.
*Approximately 97 per cent net production; 3 per cent gross.

The indicated output of motor fuel from the above and other sources may be expressed by the following table:

(Thousands of gallons)

	May, 1927	June, 1927	June, 1926
Total gasoline produced at refineries (a), (b)	1,125,000	1,117,900	1,047,700
Raw gasoline blended at plants east of California	3,200	3,300	2,500
Raw gasoline sold direct to jobbers (estimated)	800	800	800
Benzol production (c)	9,300	9,100	7,200
Total motor fuel produced	1,138,300	1,131,100	1,058,200
Daily average	36,720	37,700	35,270
(a) Includes natural gas gasoline blended at refineries	97,100	87,600	77,700
(b) Includes natural-gas gasoline run through refinery pipe lines in California	16,300	13,700	11,800

(c) Estimated with production of by-product coke as a basis.

MICHIGAN FIELDS

(Continued from Page 58)

tory but no drilling done since the Saginaw Field was opened. Numerous operators that have looked over the country appear to think the chances are just as good for an oil field as anywhere else in the eastern portion of the state.

New Completions

The Saginaw Prospecting Co.'s No. 3 on the Eddy estate, north of Davenport Street, is reported showing for an average producer of an initial of 20 bbls. Sand was topped at 1,798 feet and drilled 18 feet in and given an 80-quart shot. Same company has what shows for a 15 bbl. initial producer at No. 5 on the J. H. Brechtelsbauer property at the Shattuck and Hermansau Roads. Berea sand was found at 1,821 feet and drilled 18 feet in and given an 80-quart shot.

The Sun Oil Co.'s No. 2 on the George Kuck farm, in the northwest quarter of Section 11, Saginaw Township, and within defined limits, got the top of the Berea at 1,841 feet and after going 16 feet in the sand shot with 60 quarts is showing for 10 bbls.

The J. and S. Development Co. found the usual pay in the Berea sand on the Sliva property, at Deindorfer and Charles Streets, but concluded to make a deep test and drilled down through the Saginaw and Dundee sands. A fair showing of oil was encountered in the Dundee which was topped at around 2,900 feet and sent 78 feet in that formation, but the showing was not sufficient to warrant a commercial well from that sand and it will get its production from the Berea sand at 1,825 feet, where it should make at least 10 bbls. initial on the pump.

Myron E. Lee's No. 4 on the Brechtelsbaur property, near the Shattuck and Michigan Roads, struck top of Berea at 1,804 feet and drilled 16 feet in the sand, shooting with 50 quarts, and is estimated at 12 bbls., initial.

V. M. Vorhees and others drilled in No. 1 on the Thomas Beeker property at Eddy and Clark Streets, getting the top of the Berea at 1,804 feet and pay at 16 feet in the sand. It is estimated at 15 bbls., initial.

On the east side of the Saginaw River at the foot of Johnson Street, Charles A. Schwartz has what shows for an initial producer of 20 bbls. on the McColgan property. Sand was topped at 1,809 feet and drilled 18 feet in the sand.

Field Notes

Tevishon and Allington are drilling a well on the property of the Sutton Sales Co., in the northwest corner of Genesee Avenue and Water Street on the east side of the river.

Fordney Petroleum Co. is drilling No. 1 on the Dittmer-Raths property between Genesee Avenue and Davenport Street, right down town in Saginaw. Same company is drilling No. 1 on a community lease, in the southwest corner of North Michigan Avenue and Davenport Street.

Wicks Brothers are starting a second well on their property, north of Carroll Street. The Ohio Oil Co. is drilling a second well on the M. Frantz property, on the Shattuck Road, west of the Bay Road.

Saginaw Prospecting Co. is starting No. 4 on the Christian Scherzer property on the Bernard Road in the north end of the field, and also starting a well on the Boehner property, north of the Shattuck Road, between the Bay and Bernard Roads.

Jack Hendricks and others are drilling their No. 1 on the Campau property and also starting No. 2 on the same property, on the west bank of the river between the Michigan Central and Grand Trunk Railroad tracks.

The second test of the Sun Oil Co. in the Ashley Field of Gratiot County in Elba Township on the Edwin Robbinnolt property failed to find pay in the Berea sand that was topped at 2,108 feet and only about 6 feet of sand was found. The well is going deeper, possibly to the Saginaw sand, unless a lower Berea sand shows up that is productive.

To show how the Berea sand maintains its production No. 1, on the Martin Spatz farm, completed on December 24, 1925, by the Saginaw Prospecting Co., is said to still pump 10 bbls. daily, only a trifle less than its initial output. No. 1, on the Deindorfer Woods, city owned property, that opened up the Saginaw Field, was completed on August 28, 1925, with an initial production of around 15 bbls., and after producing for approximately two years, shows a daily output of between 7 and 8 bbls.

The Schust Co. that drilled an oil well on property at the foot of Irving street is using the oil for fuel purposes in its manufacturing plant.

NATURAL GAS FOR SALT LAKE CITY

(Continued from Page 68)

Lakota, Sundance and Nugget sands without finding oil. Altogether, close to a dozen wells were drilled by the various companies.

Baxter Basin

Baxter Basin originally was supposed to consist of two domes and both were tested to the lower horizons. During the present summer, Victor Cotner, chief geologist for the Columbia Carbon Co., and Dr. Edwin Binney, Jr., of the department of geological science of Yale University, have been making an exhaustive study of the district. The precise nature of their work is not definitely known, a part being of a scientific nature and the remainder on commercial possibilities. Doctor Binney was quoted recently as saying the field is extremely complex in structural control and that there are at present five distinct areas from which gas is produced. The quality of the gas is not the same in all areas. Marland Oil Co. of Colorado entered the district last year and drilled on the NE NW Section 11-19-104, to the north of the other tests and encountered gas at several horizons. This gas gave evidence of being of petroleum origin and strength-

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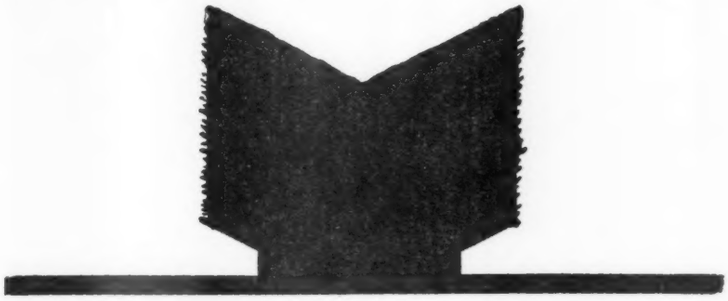

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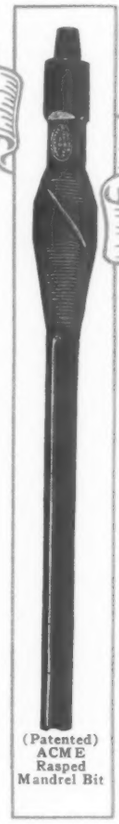
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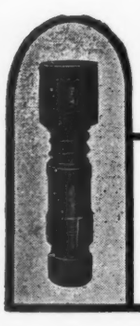

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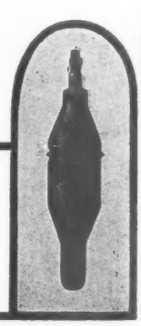

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Elms Brothers & Company—Waynesburg, Penna.
Lloyd, Smith Company—Bradford, Penna.
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ens the belief in some quarters that due to the faulting oil will be found in some of the separated areas.

Hiawatha Dome

The Hiawatha Dome is located on the Colorado side of the line. W. T. Morris, of the American Chain Co., and associates drilled a well on the Wilson permit in NE Section 22-12n-100, and at 2,270 feet opened a flow of 57,000,000 feet of gas. The well was capped and subsequently showed some oil around the valves. This well was started as a test of the Tertiary formations, but there is a question as to the horizon in which production was found, some geologists holding to the theory that there was only a thin layer of Tertiary and that the drill had gone into the Cretaceous. The Ohio Oil Co. is now drilling the second test on the structure in its No. 1 Kuykendall, NE NE Section 22-12n-100.

Clay Basin

The Clay Basin Field in northeastern Utah is being drilled by the Producers & Refiners Corp. in conjunction with the Prairie Oil & Gas Co. It has one gas well and another test is drilling in Section 22-3-65 at a depth below 5,400 feet. The only gas marketed from these districts at present is in Rock Springs, Wyo. Producers & Refiners built the line and distributing system, but subsequently sold it to the New York Oil Co., which now is operating the properties. It is stated that the Hope company has no intentions of seeking a market for the gas in Colorado in competition with the projected line from Amarillo.

SOUTHWEST TEXAS

(Continued from Page 48)

at 2,350 feet made oil, gas and salt water and is drilling deeper.

Charco Redondo—Zapata

Duke and others' No. 3 Martinez, Block 22, Duke-Langford tract, 150 feet to southeast and southwest lines, is drilling at 562 feet.

Jennings Gas Field

The Texas Company's No. 7 Jennings, Cerrito Blanco grant, 6,950 feet to southeast lines and 10,720 feet to southwest lines, is drilling at 510 feet.

Kingsville Field—Kleberg

Houston Oil Co.'s No. 1 Kissman, Block 9, Section 41, has been spudded in. Humble Oil & Refining Co.'s No. 3 Flato-Clark, Block 9, Section 40, making gas at 2,241-50 feet into lines to Kingsville with drill stem in hole, is to be completed; No. 2-B Dennett, Lot 13, Section 38, located 150 feet to CSL, is drilling; No. 4 R. J. Kleberg, Block 6, Section 40, located 660 feet to east line and 810 feet to south line, at 2,451-67 feet cored 16 feet to sand showing oil and gas and casing is being set for test. W. L. Pearson's No. 1 Rotge, Domingo Rotge tract, 8 miles southwest of the Kingsville Field, has derrick up.

Ina Field—Medina

Golden West Oil Co.'s No. 7 Schmidt Durst Survey No. 15, located between Nos. 2 and 6 at 600 feet, is drilling with second showing of gas at 460 feet.

Adams Gas Field Medina

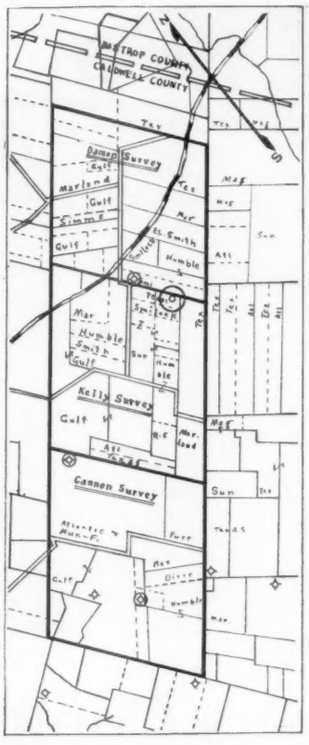
Western Gas & Fuel and Witherspoon Oil Co.'s No. 3 Adams, Block 7, is rigging up. Witherspoon Oil Co.'s No. 1 Nixon, Survey 63, located 635 feet to NW cor., is drilling at 300 feet; No. 1 L. J. Schmidt, Survey 526, located 800 feet to north line and 400 feet to east line, is drilling at 1,800 feet; No. 1 Nixon, Survey 527, located 800 feet to south line and 400 feet to east line, is standing with derrick up, waiting on rig.

Refugio Gas Field—Refugio

Houston Gulf Gas Co.'s No. 1 Shelly, a deep test, has been spudded in on William F. Morgan acreage; No. 4 Shelly is drilling at 2,300 feet; Moody's No. 1 Wilson Heard is drilling below 1,920 feet. William F. Morgan, Inc.,'s No. 2 Rose Rogers, half mile from production, at 2,510 feet is in sand and liner at 2,440 feet is being pulled to make Halliburton test; No. 8 Lambert, Survey 8, southwest of No. 4, is rigging up.

Luling Field—Caldwell

Magnolia Petroleum Co.'s No. 17 Pios, John Henry Survey, NE cor., is rigging up. North & South's No. 1 Kelly is drilling at 6,956 feet; No. 2 Tiller is drilling at 6,412 feet.



SAN ANTONIO, Tex., Aug. 8.—In the accompanying map, The Texas Company's No. 1 Beatty in Caldwell County, which is swabbing considerable oil at 2,121-2,271 feet in serpentine, is shown in the largest circle. Three other wells in that area that found some serpentine are enclosed in smaller circles. The serpentine was found around the same depth in all. The new well is about a half mile from the Missouri-Kansas-Texas Railroad tracks and about 2 miles east of the station of Dale. Dale is 3 miles from the Lytton Springs Field and was an important point for unloading material during the development of that field. Production in the Dale Field is at approximately twice the depth of the Lytton Springs Field.

SOUTHWEST WILDCATS

(Continued from Page 48)

bell is location on the 739 acres of R. H. Campbell in the Las Vivoritas grant. Holden and others' No. 3 Jones, Share 27, Block 136, at 330 feet to east line and 440 feet to north line, is shut down at 2,385 feet in blue shale for repairs. Harry Hamilton and others' No. 1 Holbein, Block 44, at 158 feet to south line and 363 feet to west line, is standing at 2,220 feet.

Starr County

T. W. Foltz and others' (Ramsey & Maxey) No. 1 is location in Survey 301 at 150 feet to northwest lines and 2,400 feet to west lines. Commonwealth Oil Co.'s No. 1 Garcia, Survey 538, located 2,722 feet to south line and 2,102 feet to west line, is drilling at 1,900 feet. Milham Corp.'s No. 2 Salinas, Porcion 111, at 11,360 varas to west line and 800 varas to north line, is at 4,389 feet. Deckle & McCarley's No. 1 Garcia, Survey 918, located at 150 feet to south line and 150 feet to west lines, is to resume drilling at 1,098 feet.

Webb County

Rio Grande Oil Co.'s No. 1 Urbahn, Santo Tomas tract, 10,000 feet to south line and 20,000 feet to east line, is drilling at 2,800 feet. O. W. Killam's No. 2 Billings, SE NW Survey 712, located 450 feet to NW cor., is drilling at 2,250 feet.

Zapata County

E. K. Bateman's No. 2 Vela, Block 4, located 675 feet to northwest lines and

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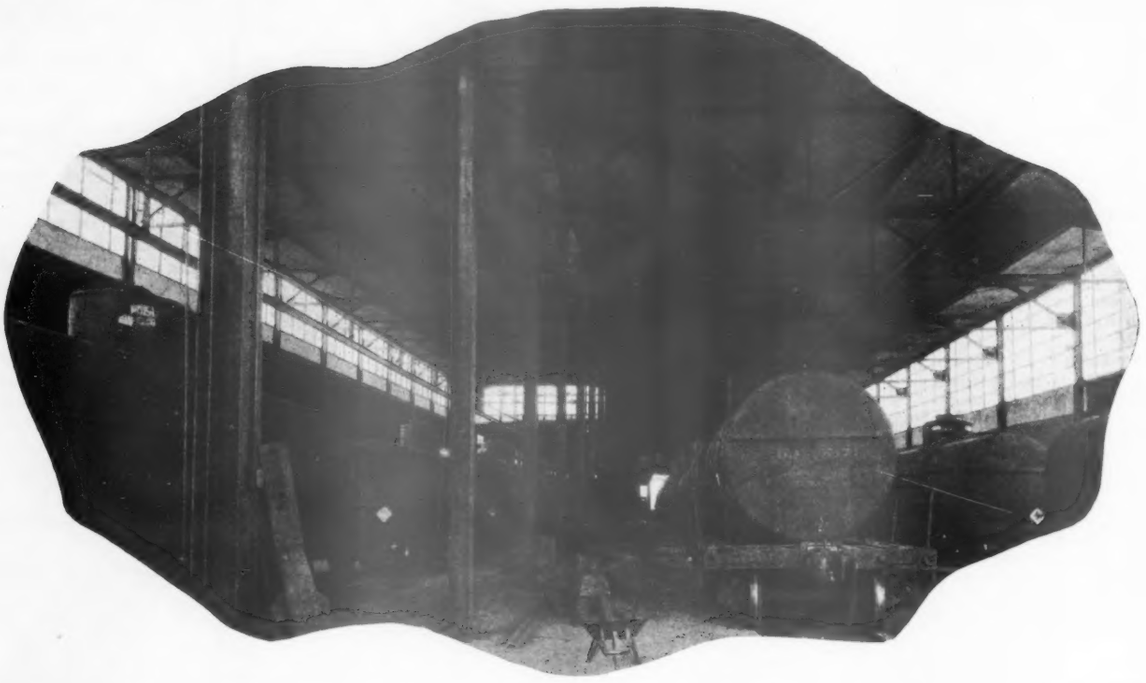

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417 feet to northeast lines, is drilling at 2,760 feet. J. H. Winch's No. 2 Bustamante, Block 2, Share 11, at 2,400 feet west of No. 1, is drilling at 1,992 feet.

Bexar County

A. R. Real, trustee's, No. 1-A Ackerman, Survey 133½, through lime at 741 feet and drilling with casing set at 663 feet. Allen Burnam's No. 1 Ward, southwest of Martinez, on the R. A. Ward tract.

Bee County

D. Hewitt's No. 1 G. A. Ray, 1½ miles west of Pettus, is drilling at 1,100 feet. Nichols & White's No. 1 Hicks, Block 19, NW cor., is shut down at 1,408 feet. Red Ant Oil & Gas Co.'s No. 1 Perry & Chestnut, B. Q. Hadley Survey, 450 feet to east line and 1,600 feet to south line of farm, is shut down after spudding in and drilling about 120 feet.

Blanco County

Miller Creek Leasing Corp.'s No. 1 Glasscock, Survey 50, located 150 feet CEL, is location.

Caldwell County

J. W. Allen's No. 1 Branyon, near North & South's No. 1 Callahan, is drilling at 1,800 feet. Calco Petroleum Co.'s No. 2 Thomas, located 600 feet southeast of No. 1, is preparing to make test. Detex Oil Co.'s No. 1 Hardeman, 4 miles north of Luling, is at 2,987 feet. Sutton & Smith's No. 1 Carter, Green Hindes Survey, 150 fet CWL, is standing at 2,597 feet; No. 2 Carter, Green Hindes Survey, 300 feet east of No. 1, is location; No. 1 J. L. New, James Hindes Survey, 150 feet to west line and 600 feet to south line, is drilling at 2,300 feet. The Texas Company's No. 1 Beatty, N. Kelly Survey, 500 feet to southeast lines and 150 feet to southwest lines of farm, is bailing oil at 2,220 feet and is shut down to build storage.

DeWitt County

J. W. Allen's No. 1 Roeder is location 12 miles west of Yorktown. Collette Oil Co.'s No. 1 James Lasater Survey, 3,129 feet to east line and 800 feet to south line, is rigged up ready to spud in. Empire Southern Oil Co.'s No. 2 Smith, Survey 3, located three-fourths of a mile west of No. 1, is drilling at 2,450 feet. McNeil & Matthews' No. 1 Kaiser, A Dillard Survey, 1,508 feet to NW cor., has resumed drilling. Williams & Gates' No. 1 Gohmert, G. W. Brooks League, 175 feet to north line and 300 feet to east line, is drilling at 350 feet.

Dimmitt County

Humble Oil & Refining Co.'s No. 1 City National Bank, Survey 654, located 700 feet to north line and 2,000 feet to east line, at 3,032 feet bailed enough oil for sample.

Fayette County

Magnolia Petroleum Co.'s No. 1 Fordtran, J. R. Jones Survey, 200 feet to northeast lines and 1,050 feet to west lines, is drilling at 2,226 feet.

Goliad County

C. W. Simpson is moving in machinery for test, 12 miles southeast of Yorktown. Houston Oil Co.'s No. 1 J. F. Lott, G. Cortinas Survey, 2,000 feet to north line and 300 feet to west lines, is rigging up; No. 4 R. L. Pettus, P. Trevino Survey, is location 1,200 feet southwest of No. 2.

Gonzales County

Bristol Oil & Gas Co.'s No. 2 Denman, A. Zumwalt Survey, is shut down at 807 feet. Gonza Petroleum Co.'s No. 1 Elder is to make test at 1,636 feet; No. 2 Elder, Block 11, southwest of No. 1, is drilling at 1,250 feet; No. 1 Sinclair, 4 miles northeast of No. 2 Elder, is drilling at 1,200 feet. Martin Oil & Development Co.'s No. 1 Preston, Pace League, has set casing at 1,570 feet, 1 foot in rock, to make test. The Texas Company's No. 2 Plowman, B. Lockhart Survey, is moving on.

Guadalupe County

F. A. Lain's No. 1 Weinert, W. K. Estell Survey, 150 feet CNL, is standing at 3,002 feet. H. H. Temple's No. 1 McAlester, Edward Kellett Survey, 450 feet to northeast lines and 1,420 feet to northwest lines, is shut down at 1,940 feet for titles.

Hays County

J. E. Rodgers' No. 1 Hohenburg, 2½ miles east of San Marcos, is drilling at 1,700 feet.

Karnes County

Reynosa Oil Corp. (Earl B. Reynolds) No. 2 Butler, Block 43, located 1,000 feet south of No. 1, at 1,947 feet, was put on the pump and tested, making a little gas only, and is to be drilled deeper.

Kerr County

Walker-Van Duyn's No. 1 Leigh, Survey 38, located 500 feet north of river and 150 feet south of the railroad, has resumed drilling at 2,405 feet.

Kinney County

Havelin Oil Co.'s No. 1 Weatherby, center of Section 21, Block 5, is shut down at 4,330 feet for repairs. W. A. Stephens and others' No. 1 Jim Clamp, John Winters Survey No. 346, at 5,362 feet to west line and 5,674 feet to south line, at 1,000 feet is reported to be showing gas.

Lavaca County

M. L. Benedum's No. 1 Russek, near Ezzell and due south of Hallettsville, is drilling at 120 feet.

Lee County

Alberts, Glass & Wills' No. 1 Henderson, William Mock Survey, 3,960 feet to west line and 1,350 fet to south line, is drilling. M. O. Ricketts and others' No. 1 Sanders, Joseph Maxmillian League, 250 feet to SE cor., is shut down at 800 feet.

Live Oak County

Henderson Coquat's No. 1 G. P. Reagan (formerly The Texas Company's No. 2 Reagan, left standing at 873 feet) moving on to deepen. Delta Oil Co.'s No. 1 McNeil, Jane Curry Survey, 4,000 feet to NE cor., is shut down at 530 feet. Houston Oil Co.'s No. 18 Cartwright, Colchado Survey, is location 2,404 feet northeast of No. 5. No. 19 Cartwright, W. J. Cannon Survey, is location 1,500 feet northeast of No. 17. R. P. Lightfoot's No. 1 Thomas, Survey 963, Block 19, west central, at 1,316 feet tested salt water showing little gas. Simmons Oil Co. (Henderson Coquat) No. 4 Sartain, is shut down at 2,303 feet to change to heavier rig. J. W. Walton's No. 1 Roberts, west of Three Rivers, at 1,860 feet tested salt water and is pulling casing to drill deeper.

Medina County

California-Medina's No. 1 Rothe is drilling at approximately 3,300 feet. Johnson's No. 1 Mumme, Survey 100, is standing at 1,100 feet with rig moved off. Medina Oil Co.'s No. 1 Taylor, Survey 135, has rebuilt rig pulled in at 1,000 feet. R. P. O'Brien's No. 1 Nixon, Survey 531, is standing at 1,007 feet. Cecil Switzer's No. 1 Zerr, Survey 459, is drilling around 3,300 feet. J. A. Zwayze's No. 1 Oeffingers, Survey 129, center of north 40 acres of Block 22, is shut down at 300 feet.

Maverick County

Johnstone & Hout's No. 1 Whipff, 9 miles from Eagle Pass, is shut down at 1,220 feet. Ryan Consolidated Petroleum Co.'s No. 1 Indio, Survey 14, center, having trouble with casing at 1,380 feet. Ryeade Oil Corp.'s No. 1 Chittim, Section 129, Block 7, is fishing at 5,630 feet; No. 2 Chittim is location in Block 7, Section 158; No. 2 Sullivan is drilling at 4,330 feet.

Milam County

Coffield-Hale's No. 2 Stephens is drilling at 800 feet. Groneman Brothers' No. 1 Key, Houston & Prewitt Survey, is drilling at 2,250 feet. W. A. Jones' No. 1 Casparis, 960 feet from No. 1 Smith, is drilling; No. 1 Smith, T. J. Chambers Survey, 150 feet to northeast and 810 feet to southeast lines, is trying to complete test; No. 2 Smith, an offset to No. 1, is rigging up. Yegua Oil Co.'s No. 1 Rochards, J. H. Smith Survey, is shut down at 2,290 feet.

McMullen County

C. H. Atherton's No. 1 Lark is making location for the test. Nelson & Woods' No. 1 Shiner, Survey 48, Block 74, located 1,000 varas to east line and 350 varas to south line, is drilling at 1,480 feet. George Pickett's No. 1 Jacob, Survey 7, located 660 feet to CNL, is standing at 3,030 feet. R. L. Taylor's

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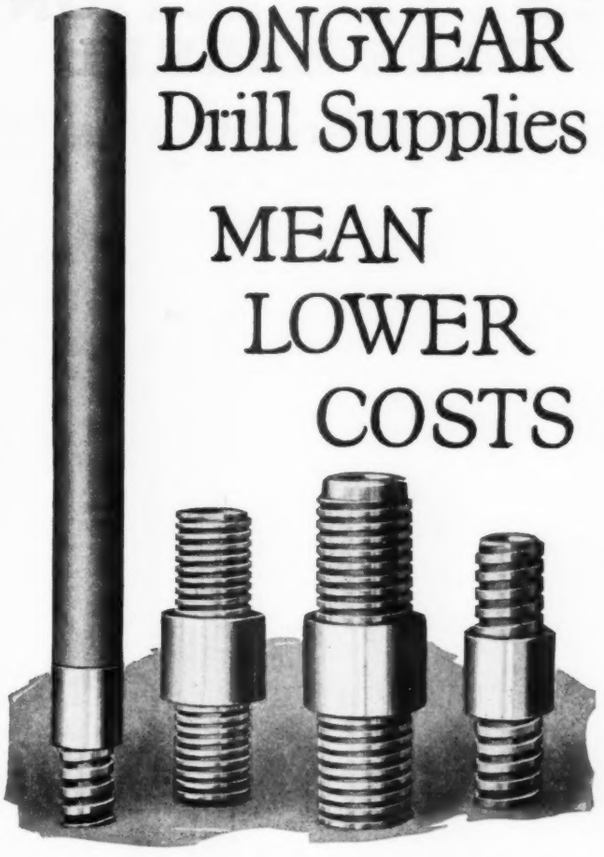

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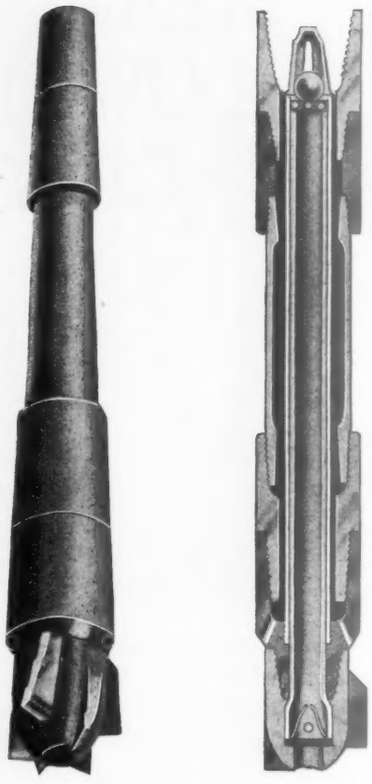

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No. 1 Shiner, Survey 14, located 150 feet to SW cor., is drilling at 1,900 feet.

San Patricio County

J. M. Davis' No. 1 Welhausen & Driscoll, center Lot 8, Section 68, has been spudded in. Houston Oil Co.'s No. 1 Ragsdale, J. N. Seguin Survey, is location 300 feet to SE cor.; No. 1-A Sun Oil Co., Block 8, A. S. Taft Survey, is location 200 feet to south line and 250 feet to east line. Huber & Crawford's No. 1 Mathis, Delgavo Survey, Block 17, located 300 feet to northwest and 2,500 feet to southwest lines, is shut down at 2,516 feet. National Oil Co.'s No. 1 J. E. Sullivan, approximately 401 feet to southwest lines and 800 feet to southeast lines of the farm, has derrick up and moving in machinery. John Sigmund's No. 7 Wallace Robinson is waiting on fuel oil to resume drilling. George E. Smith's No. 1 J. C. Cage, at 160 feet to north, east and west lines of tract, is drilling at 1,600 feet.

Val Verde County

Crusoe-Williams' No. 1 Holman, Section 5, Block N, is shut down at 2,930 feet. Douglas Oil Co.'s No. 1 Sellers, Section 82, is at 3,020 feet. East Del Rio Oil Co.'s No. 1 Russell, Section 183, is shut down at 3,182 feet for repairs and making a little gas. Hiawatha Oil Co.'s No. 1 Sellers, Section 1,031, is drilling at 2,950 feet. Independent Operators' No. 1 Whitehead, Section 30, Block 4, is repairing equipment. Magnolia Petroleum Co.'s No. 1 Whitehead, Survey 81, is drilling at 2,000 feet in blue shale. O. O. Owens and others' No. 1 Mills, Section 128, Block 1, is resetting casing at 2,527 feet and will try to make commercial well.

Zavala County

J. G. Pundt's No. 1 West, Fuentes Survey, NW cor., is drilling at 328 feet. B. F. Thompson's No. 1 West, West ranch, is drilling at 228 feet with 200 feet of 10-inch casing set.

Wilson County

Thomas and others' No. 1 Aug. Haese, Survey 124, located 300 feet to NE cor., is drilling at 1,985 feet.

CANADIAN FIELDS

(Continued from Page 56)

which was encountered last Wednesday morning at 3,978 feet would be struck. Now that known horizon markers are again encountered the problem of calculating the depth to other definite horizons will be somewhat simplified.

Test of the Oil

"The results of a test on the Calmont oil, made by the Dominion Government supervisory engineering department, is as follows:

Gravity, 35 degrees Baume; gasoline content, 18.83 per cent; kerosene, 7.84; gas fuel oil content, 29.66; residue, paraffin base.

"It is too early to make any estimate of the possible capacity of the well. A bailing test will me made. When this first sand has been tested the well will be drilled to the nearby underlying sands. It should then be possible to take all the Blairmore production together.

"No water has thus far been encountered in these oil sands. On this account it is believed the location of the Calmont well is a very favorable one, because it should have tributary to it the oil lying higher upon the structure.

"Until the bailing tests for which preparations are now being made have been completed and the underlying sands have been penetrated and tested, the company will not be in a position to decide upon what policy it will pursue with respect to future development."

McLeod Oil Co.'s No. 3, LSD 16, Section 1-20-3w5, which got a fair show of light crude in the Dakotas at 3,182 feet, is being given a pumping test. The sand was struck at 3,170 feet and the drilling continued 12 feet for production. The unfinished pumping test indicates a potential production of 100 bbls. a day. The oil is a light green crude, around 50 degrees, and is being sold to the Imperial Oil, Ltd., refinery at Calgary. McLeod Oil Co.'s No. 1, which is producing about 9 bbls. a day from the Dakotas at 2,400 feet, will be deepened from 15 to 20 feet to more fully test the formation. No attempt will, however, be made to carry No. 1 to the deep lime. No. 2 is in the deep lime at 4,363 feet and making around 50 bbls. of crude naphtha.

McLeod No. 4 will be started as soon as No. 3 is definitely finished and will in any event be spudded in this fall. The location of No. 4 and the equipment to be used have not been definitely determined.

Spooner Oils' No. 1, LSD 12, Section 13-20-3w5, is reported drilling near the top of the Madison limestone at 4,305 feet. The 8¼-inch casing is being carried down behind the drill, which is working in the Fernie shales. In the Fernie-Calcareous horizon the test got a show of oil, estimated good for 50 bbls. a day. This has been shut off and the test is going deeper for bigger production. At 4,240 feet an additional flow of wet gas, estimated at 2,000,000 feet a day, was reported.

Flow of Wet Gas

Vulcan Oils' No. 2, LSD 11, Section 13-20-3w5, drilling in the Dakota sand at 2,880 feet encountered a flow of wet gas, estimated at 5,000,000 feet a day, with a potential recovery of 10 bbls. a day of crude naphtha. A little oil is coming from the higher levels. The bit is drilling for 10½-inch casing, with about 1,100 feet of open hole; it is planned to carry the 10½-inch to 3,000 feet. An earlier flow of wet gas at 2,560 feet caught fire, but the flames were put out by hand extinguishers before they could reach the derrick. At 2,680 feet a showing of light green crude was encountered, apparently between 55 and 60 degrees; it is estimated good for 12 to 20 bbls. a day.

Dalhousie Oil Co.'s No. 5, LSD 16, Section 30-19-2w5, is at 4,525 feet and running 6¾-inch casing before drilling deeper into the oil sand which gave a potential production of 250 bbls. of light crude. The well, which has been flowing by heads, is showing more activity as the casing is lowered, and blew five times in three hours. As soon as the casing reaches the bottom the test will be drilled a little deeper into the sand; and if necessary 2-inch tubing will be put in. Some difficulty has been experienced cleaning out the lower part of the 60 feet of caving. A 3-inch line has been laid from Dalhousie No. 5 to the Royalite Oil Co. plant to handle the production. Dalhousie No. 1, LSD 4, Section 18-20-2w5, which was shut down to repair the foundations of the derrick, has resumed and is reported drilling at 4,020 feet with additional shows of gas. Dalhousie No. 6, LSD 10, Section 13-20-3w5, is at 3,725 feet and working with a bad caving. It may be necessary to cement the well before drilling deeper. A bailing test of the oil showing at this level indicates a production of 15 bbls. a day and the test will be drilled deeper for commercial production.

Home Oil Co.'s No. 1, LSD 10, Section 20-19-2w5, is shut down at 4,560 feet, with indications of increasing production of both wet gas and crude oil. The company is experimenting with special apparatus for handling the producion, which includes both crude oil and wet gas with a potential recovery of crude naphtha. Reports in circulation that Imperial Oil, Ltd., was negotiating for the purchase of the Home Oil Co. production and holdings in the Turner Valley have been specifically denied by George F. Harrison, secretary-treasurer of the Home Oil Co. Home No. 2, LSD 14, same section, shut down at 2,095 feet with a 12½-inch hole, is being cleaned out preparatory to deepening to the producing horizon encountered in No. 1.

Getting Fair Shows

Okalta Oils, LSD 1, Section 1-20-3w5, is reported drilling at 3,500 feet, after encountering fair shows of light crude in the Dakotas at 3,300 and 3,450 feet. The drill entered the Dakotas at 3,265 feet.

British Dominion Oil Corp., LSD 5, Section 5-20-2w5, is at 5,990 feet and running 6¾-inch casing.

New McDougal-Segur Oil Co.'s No. 1, LSD 14, Section 12-20-3w5, is delivering oil to Okotoks for shipment to the Regal oil refinery topping plant at Calgary. New McDougal-Segur No. 1 had about 2,500 bbls. accumulated in storage during July. New McDougall-Segur No.

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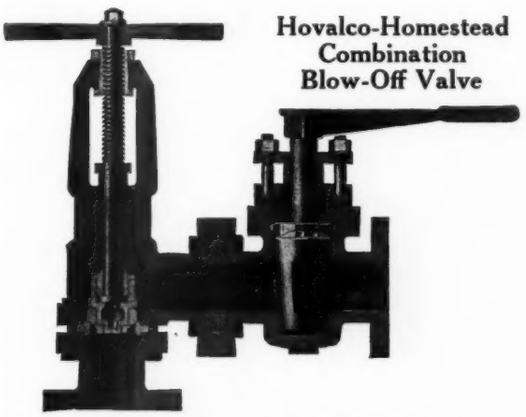
*Name upon request.



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Second, Open the "Hovalco" and control the flow.

Third, Close "Hovalco."

Fourth, Close Homestead—Thus you keep the Homestead Valve in good tight condition for emergency use.

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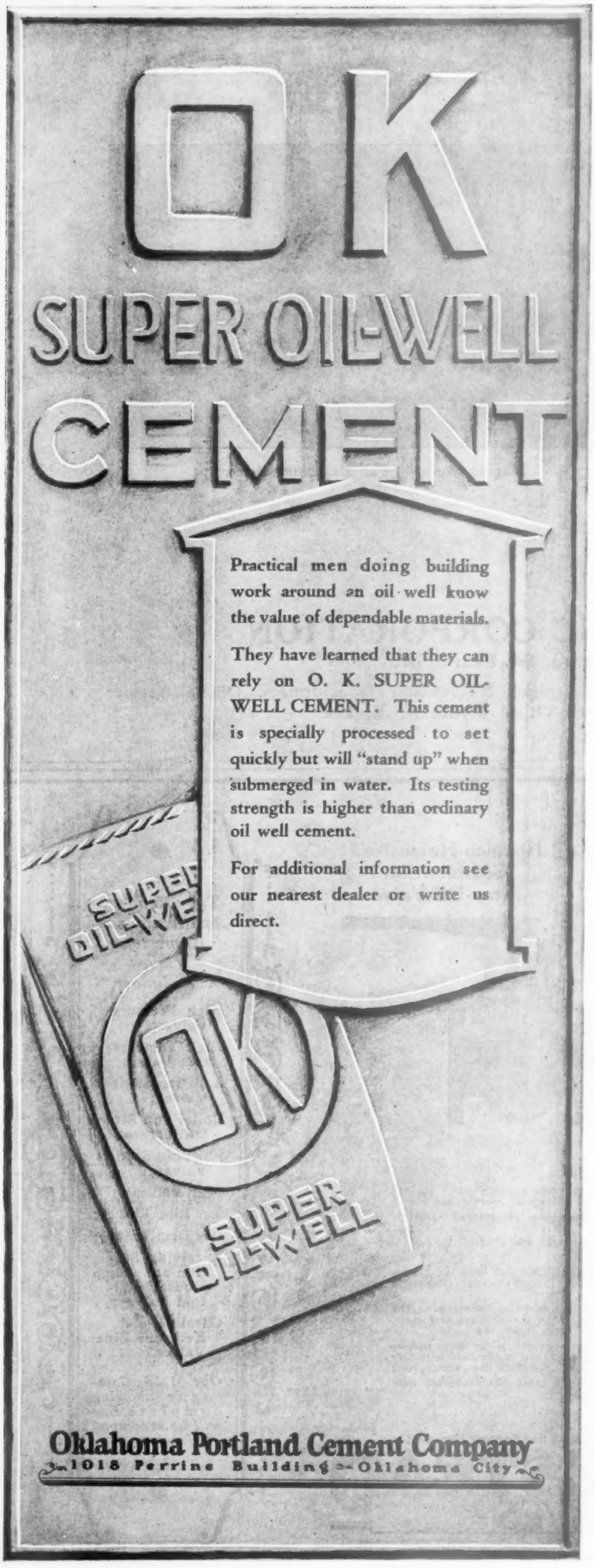
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2, same LSD, is reported drilling for 12½-inch casing at 1,670 feet.

Illinois-Alberta Oil & Refining Co.'s No. 1, LSD 14, Section 12-20-3w5, reports an aggregate production of 7,603.1 bbls. of crude naphtha for the three months from April 1 to June 30. The monthly production was: April, 2,436.4 bbls.; May, 2,644.3 bbls.; June, 2,522.4 bbls. Prodution averaged 83.55 bbls. a day. The production is sold to Imperial Oil, Ltd., at $3.95 a barrel, the crude naphtha being pumped through a 2-inch pipe line to the Royalite Oil Co. plant and thence to the Imperial Oil, Ltd., refinery at Calgary. Illinois-Alberta No. 2, same LSD, has the derrick up and is installing the diamond drill outfit used to finish No. 1. No. 2 is expected to spud in by August 15.

Royalite Oil Co.'s No. 7, LSD 3, Section 13-20-3w5, has drilled out the cement at the bottom of the 6¾-inch casing at 3,614 feet depth. The 4½-inch casing will be run for some distance below the 6¾-inch. Royalite's No. 8, LSD 9, Section 11-20-3w5, offset to McDougall-Segur s No. 1 producer, is rigging up. Royalite No. 9, LSD 6, Section 13-20-3w5, offset to Vulcan Oils No. 1, is rigging up. Both these tests will be spudded in with cable tools and drilled deeper with the rotary.

In the north end of the Turner Valley, Foothills Oil & Gas Co. No. 1, formerly Imperial-Millarville No. 1, SW Section 26-20-3w5, is putting in rotary equipment to resume drilling at 525 feet. A second well will be drilled when the organization of the Foothills company is completed, but the location has not yet been determined.

At the Royalite Oil Co. plant two 10,000-bbl. tanks are being erected to handle the Dalhousie Oil Co.'s No. 5 crude oil production. A 3-inch line has been laid to carry the oil. From these tanks the crude will, for the present, be pumped to the Imperial Oil, Ltd., refinery at Calgary through the Royalite Oil Co. crude naphtha line, runs of crude oil alternating with crude naphtha runs.

Stockmen Oils' No. 1, LSD 1-2, Section 27-20-3w5, is drilling in a dark shale at 5,200 feet. This shale was 200 feet thick at the Vlucan No. 1 and if the same conditions hold good in the Stockmen well, the test should get the top of the Madison in another 20 feet of drilling. The 6¼-inch casing will be run to the top of the limestone.

Resumed Drilling

New Valley Oil Co., LSD 6, Section 6-21-2w5, after cleaning out the hole, has resumed drilling at 1,550 feet. The drill is now reported at 1,575 feet with a small show of gas. Seneca Oils, LSD 1, Section 34-20-3w5, is reported to have resumed drilling at 2,706 feet. Regent Oil Co., LSD 16, Section 1-20-3w5, has finished running 10½-inch casing and resumed drilling at 2,650 feet. Underreaming will be done to carry this string down past the crude oil horizon around 3,250 feet, after which the 8¼-inch will be run to the top of the Madison limestone at approximately 3,640 feet. The test will be carried to the big production in the Madison.

Anaconda Oils has let the contract to C. L. Mann for camp buildings and derrick in NE LSD 13, Section 20-19-2w5, work to start at once. The test is expected to spud in this month. The location is between Home No. 1 and Dalhousie No. 5 on the west side of the anticline. Advance Oil Co. is locating a test in the Turner Valley and will commence work on the derrick early in August.

Sentinel Oils, Section 8-20-2w5, is reported drilling below 1,935 feet. Midwest Oil Co. has a location in LSD 13, Section 12-20-3w5.

McLeod Field Superintendent

Appointment of J. H. McLeod, manager of the Dalhousie Oil Co., to be field superintendent in charge of all drilling and operations of Imperial Oil, Ltd., and its associated and subsidiary companies in Alberta, was announced at Calgary this week. The announcement was made by Manager T. H. Draper of the Royalite Oil Co., who on account of ill health, has been granted a temporary leave of absence by the company and is leaving for an extended trip to the East. Mr. McLeod's promotion to have charge of the operations of Imperial Oil, Ltd., and its subsidiaries in Alberta, is of far-reaching importance as it means a complete reorganization and consolidation of all the field work and drilling operations of Imperial Oil, Ltd. The subsidiaries include the Royalite Oil Co., the Dalhousie Oil Co., the Foothills Oil & Gas Co., the Midwest Oil Co. and the Northwest company.

The hitherto scattered headquarters of the various subsidiaries will now be centralized, activities of all the companies being directed from the present Imperial Oil, Ltd., main office at Sixth Avenue and Second Street West, Calgary. The office is being enlarged to accommodate the increased staff. While the principal operations of Imperial Oil, Ltd., and its subsidiaries are now pretty well concentrated in the Turner Valley, in the past it has operated simultaneously at points all the way from the International boundary to the Arctic Circle. At present, outside the Turner Valley, one well is being drilled on the Highwood structure, west of Nanton; and other drilling may later be undertaken if geological reports or actual developments justify it. In the Turner Valley the Dalhousie Oil Co. is drilling Nos. 1, 5 and 6; Royalite Oil Co. is drilling Nos. 6 and 7 and rigging up Nos. 8 and 9; the Foothills Oil & Gas Co. is drilling No. 1 and will shortly locate No. 2, and the Midwest Oil Co. has located No. 3. All these activities will be directed by Mr. McLeod.

In the southern foothills, Imperial-Highwood No. 1, LSD 3, Section 36-18-3w5, is drilling for 10½-inch casing at 2,650 feet. In the Jumping Pound district west of Calgary, Imperial-Bow River No. 1, abandoned at 5,585 feet with the drill still in the Benton shales, is pulling the 8¼-inch casing.

Moose Mountain Field

In the Moose Mountain Field, Signal Hill Oil Co. No. 1, LSD 9, Section 34-23-5w5, has been definitely abandoned at 2,025 feet, after being shut down for over a year. The well will be plugged with cement to shut off water from the sandy formation lying above the oil horizon, and as much as possible of the casing salvaged. Signal Hill No. 1 was formerly Moose Mountain No. 2 and was put down in the latter days of the Calgary boom, securing a fair oil showing. Signal Hill No. 2, same LSD, is temporarily shut down at 1,450 feet.

On the Morley Indian Reserve, Gold Coin Oils, Ltd., is at 3,156 feet and drilling. The drill is apparently near the top of the Dakota sand, in which production is expected. Some small gas shows have been encountered. Wabash Oils is also drilling on the reserve; while Reserve Oils is shut down at 1,894 feet.

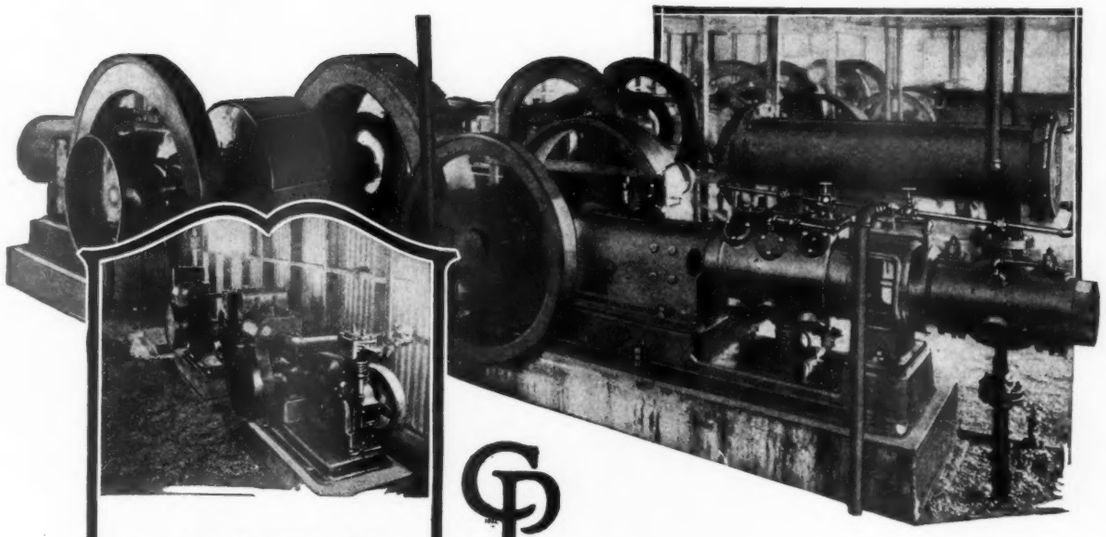
On the Gordon Campbell Dome, 2 miles north of Aldersyde, Ranchmen's Gas & Oil Co., LSD 16, Section 13-20-29w4, is drilling at 1,225 feet. A gas flow estimated at 500,000 feet a day, was struck at 910 feet, and some additional gas was struck below 1,000 feet. The 12½-inch casing will be lowered to the bottom of the hole when the flow will be measured.

Lancashire Oils, Ltd., of Calgary, is arranging to drill a test on the E. B. Dorten farm, a mile east of Arrowhead and 9 miles south of Gleichen. This is the second test in the Gleichen district, the Oil Producers Corp. of Canada having a derrick up in LSD 4, Section 24-22-23w4, a mile west of Gleichen. Lancashire Oils has a location in the Turner Valley in LSD 12, Section 3-20-3w5.

In the DeWinton district, Anglesey-Lakeview No. 1, LSD 1, Section 22-21-1w5, on the Rowland Ness farm, is reported to have spudded in.

Southern Alberta

In southern Alberta, Devenish Petroleums' No. 1, LSD 5, Section 27-5-14w4, south of Skiff, has started tank car shipments of crude to the Imperial Oil, Ltd., refinery at Calgary which has contracted to take the entire output. Shipments started the end of July, at which time Devenish Petroleums, Ltd., had about 1,000 bbls. in storage. The crude in the well was reported standing right up to the control head and at times flowing into the lines. Swabbing will be resumed pending installation of the gas lift pump, which is expected to be in operation the last week in August. The crude is trucked to Skiff, a distance of 7 miles.



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and thence transported in tank cars to the refinery at Calgary. It is planned for the present to ship about three tank cars a week.

Near Warner, Gas Production & Transportation's No. 1, northeast quarter Section 21-4-18w4 has spudded in.

In the Cypress Hills district near Medicine Hat the Eagle Butte Oil Co., headed by C. E. Roth, will drill a test in Section 31-7-4w4. The drilling outfit used for the Roth No. 2 deep test at Redcliffe is being shipped to the location, and will be rigged up at once. The company has been incorporated under Dominion charter with an authorized capitalization of 3,000,000 no-par shares. The officers are: President, C. E. Roth; first vice president, W. D. Faurot; second vice president, F. W. Gershaw; secretary, H .O. Duggan; treasurer, W. H. Gray; directors, Charles Pingle, R. A. Reed. The Eagle Butte Oil Co. has secured 3,200 acres of the 80,000 acres filed by the Cypress Hills Syndicate on this structure. Imperial Oil, Ltd., is reported to hold 25,000 acres.

On the Montana side, the Equitable Oil Co. of Regina, Sask., financed largely by Canadian capital, is undertaking a test on the Kremlin Dome in Hill County, Montana.

British Columbia

In southeastern British Columbia the Glacier Oil Co.'s No. 1 well at Sage Creek is being cleaned out, following the recent shot. Pending a capacity test, results of the shot are uncertain. The well before the shot had a fair show of high-grade crude at 3,280 feet deep. Reports crediting the well with 500 bbls. a day production are decidedly exaggerated, but it may prove a small producer. S. C. Ferdig, of Montana, is drilling an offset well for the B. C. Coal & Oil Co.

In Saskatchewan the Big Six Oil Co. is bringing a drilling outfit from Montana for a test to be put down near Kenaston. At Simpson the Simpson Oil Co., in Section 9-29-25w2, has cemented at 300 feet and is resuming drilling. At the annual meeting of the company held at Simpson recently the following were elected directors: H. H. Collins, W. A. Graham, O. L. Etter, William Cole, G. M. Reed, E. R. Ketcheson. The test is being financed largely by local capital.

In Ontario, Union Natural Gas Co.'s No. 16 on the Tyrrell farm, Dawn Township, Lambton County, is reported drilling below 1,250 feet. No. 17 on the Butler farm is drilling below 900 feet. In the Tilbury Field, Kent County, Union Natural Gas Co.'s No. 269 finished a small gasser in the Tilbury sand. No. 270 on the Coatsworth farm, Lot 182, Talbot Road, Romney Township, is reported drilling between 900 and 1,000 feet. The Southern Ontario Gas Co. is drilling a test for gas on the Dawson farm, Lot 187, Talbot Road, Romney Township.

In Warwick Township, Lambton County, a shallow test for oil on the John Cundick farm, drilled by Harry B. Smith and associates of Windsor, was shot at 501 feet, and is reported to have a fair pumping production. Additional shallow tests will be drilled on the Cundick farm and other acreage in Warwick Township.

LOUISIANA-ARKANSAS

(Continued from Page 46)

in. Dixie Oil Co.'s No. 2-A Noel, Section 13, is fishing for an underreaming lug at 3,868 feet. No. 10 Slattery, Section 27, is drilling at 3,977 feet. Gulf Refining Co. has three deep tests drilling at Pine Island. No. 10 on the Herndon lease, Section 15, is drilling shale at 1,886 feet. No. 14 Tyson, Section 14, is down 2,637 feet, and on the same lease is No. 15, in which 8⅝-inch casing has been cemented at 2,336 feet. The Gulf Refining Co. already has two deep wells on this lease, Nos. 12 and 13. On the Murray land in this section, Haynes Brothers are down 2,303 feet in their second test and have cemented 8¼-inch casing. To the west in Section 15, their No. 1 Spell is drilling at 2,810 feet.

Magnolia Petroleum Co. has started drilling on its No. 26 Raines, Section 22, and is down past 200 feet. Ohio Oil Co.'s No. 25 Smith, Section 12, northeast of the main drilling activity, has reached a depth of 4,613 feet but at present has 18 joints of drill stem dropped in the hole and a fishing job is under way.

During the week, Magnolia abandoned a Pine Island test, No. 16 Dillon, Section 24, which had reached a depth only of 1,750 feet after drilling sonce May, 1926. It encountered salt water.

Waskom Field

In the Wakom Field, J. R. Bahan has completed No. 3 Stringfellow, Section 19-17-16, producing 500,000 feet of gas with a rock pressure of 1,095 pounds. This is a deep test for that district, being down 2,813 feet. Another Waskom test, The Texas Company's No. 1 Alexander, Section 27-18-16, has been abandoned because of salt water at 1,890 feet. In Section 35 to the southeast J. P. Evans and associates have abandoned temporarily No. 1 Trosper because of salt water at 919 feet.

Greenwood Producing Co.'s No. 1 Bickham, Section 23, is down 901 feet where 8-inch casing has been cemented. This company's No. 1 on the Thigpen & Herold property in Section 23, has been abandoned temporarily at 910 feet because of salt water. In Section 24, this company has a rig for its second test on this lease. B. A. Hardy's No. 1 Bickham, Section 23, is sidetracking drill stem at 2,175 feet. Standard Oil Co.'s No. 2 Trosper, Section 34, is drilling in hard rock at 2,774 feet. State Line Oil & Gas Co. has abandoned temporarily No. 4 Thigpen & Herold, Section 26, after drilling to a depth of 891 feet. However, in the same section and lease, a derrick is up for the company's fifth test.

Magnolia Petroleum Co.'s No. 1 Bell, Section 4-17-16, also in the Waskom district, is reaming at 2,576 feet. This company has a 2,500,000-foot gasser in No. 2 Bryson, Section 8, the latter being completed at 961 feet. Greenwood Producing Co.'s No. 2 Angurs, Section 6-16-16, is coring shale at 2,927 feet.

In the Hosston shallow pool, northern Caddo Field, Bayou State Oil Corp.'s No. 32 Hoss, Section 24-22-15, has been shut down at 700 feet.

Bethany Oil & Gas Co.'s No. 1 Offenhauser, Section 1-20-15, is being bailed for a test of sand at 2,250 feet. Falcon Drilling Co.'s No. 1 Schmidt, Section 27, is drilling at 135 feet on its second hole, the first hole having been abandoned the past week after reaching a total depth of 2,130 feet.

T. D. Gray and associates have drilled 600 feet in No. 1 Hart, Section 29-21-16, but at present are repairing the rig. Ten-inch surface casing was set at 42 feet. To the southeast in Section 33, Standard Oil Co.'s No. 187 Stiles was bailed dry without a showing of anything in a sand at 1,852-62 feet.

In the extreme southeastern corner of the parish, The Texas Company is arranging to test a sand at 1,665 feet in No. 4 Hutchinson, Section 9-15-12. Woodley Petroleum Co.'s No. 1-B Knight, Section 3, has 6⅝-inch casing cemented at 1,912 feet.

LaSalle Parish

Ayers Brothers' No. 5 Urania, Section 30-10-2e, Urania Field, is drilling at 500 feet. Hope Oil & Gas Co.'s No. 4 Urania, Section 19, this district, has been shut down at 300 feet. In the latter section is National Gas & Fuel Corp.'s No. 10-M Urania, which is down 1,552 feet, where 6-inch casing has been cemented. Casing also has been cemented in Wingfield and associates' No. 2 Gibson, Section 2-9-1e, this pipe being 6⅝-inch at 1,493 feet. The Urania Field got a new well in Sackrider and associates' No. 1 State, Section 26-10-1e, which was completed at 1,502 feet pumping 75 bbls.

Monroe District

Falcon Drilling Co. attempted to bail out No. 1 Gladney, Section 5-21-7e, Morehouse Parish, but could not bail salt water lower than 400 feet from the top. It had a show of gas from a sand rock at 2,578-83 feet. Natural Gas Producing Co.'s No. 20 Crossett, Section 21-23-7e, this parish, is drilling at 2,820 feet. In Section 15-20-4e, W. C. Feazel has started the second hole for No. 1 Faulk and is drilling between 150 and 200 feet. The Texas Company has set 15½-inch casing at 172 feet in No. 1 Sidney, Section 22-20-6e.

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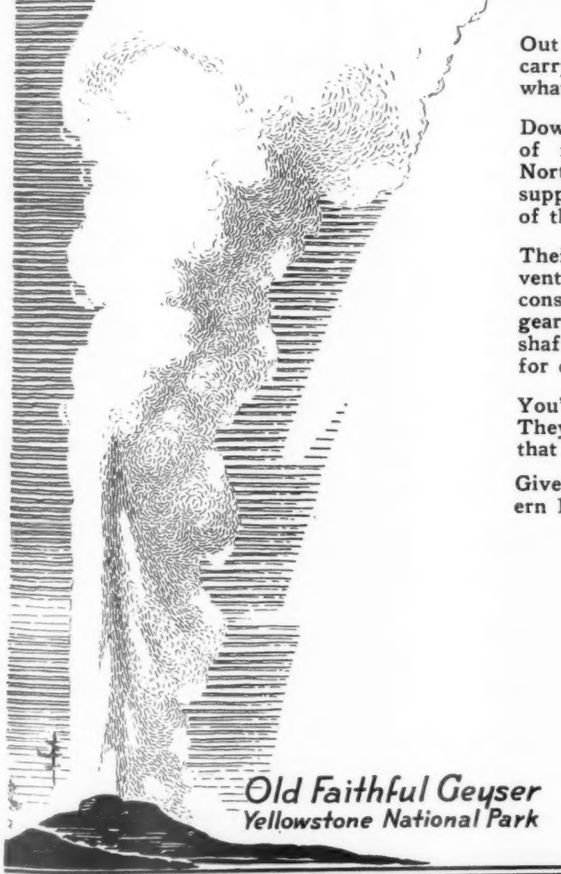

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has a rig up for its first test on the Sullivan lease, Section 5-18-4e. Jordon Drilling Co.'s No. 2 Fudican, Section 25-18-4e, has been shut down at 2,648 feet. Ladell Properties has completed No. 42 fee, Section 31-20-5e, flowing 9,000,000 feet of gas from a depth of 2,923 feet. No. 43 fee is drilling at 110 feet. Ouachita Gas Co. has started drilling in No. 4 Leiber, Section 3-19-4e, and is down 185 feet.

In Union Parish, C. E. Camette has staked a location for No. 2 Tugwell, Section 21-22-1e. Natural Gas Producing Co. is arranging to test a formation at 2,158 feet in No. 2 Peak, Section 12-20-3e, and has a rig up for the third test on the same lease, but in Section 5-20-4e, Southern Carbon Co. has completed No. 1 Gulley, Section 19-20-4e, flowing 8,500,000 feet of gas from a total depth of 2,149 feet.

Webster Parish

Crusaders Oil & Producing Co. has a derrick completed for No. 18 Hope, Section 24-21-10, Cotton Valley Field. Magnolia Petroleum Co.' No. 3 Cox, Section 23, is drilling in sandy lime at 3,804 feet. This company's No. 3 Marshall, Section 21, has 6⅝-inch casing cemented at 2,544 feet. On the same lease a rig is up for this company's fourth test. Ohio Oil Co.'s No. 4 Bank of Cotton Valley, Section 22, is drilling at 4,444 feet. Woodley Petroleum Co. has cemented 6⅝-inch casing at 4,107 feet in No. 1-B Cox, Section 23.

Magnolia Petroleum Co. is rigging up for its second test on the Branton lease, Section 6-22-10. This company also has a location for its second test on the O'Bier land, Section 32-23-9. Magnolia's No. 1 O'Bier is drilling sand at 2,601 feet.

ARKANSAS

Smackover Field

In the Louann sector, Crescent Petroleum Co. has decided not to drill No. 1 Saxon, Section 5-16-16. This test was drilled to 53 feet last January and 10-inch surface casing set but has been shut down since. To the south in Section 8, G. J. Childs has completed No. 2-B fee pumping 20 bbls. from a depth of 2,270 feet. National Consolidated Petroleum Co.'s No. 1 Fagg, this section, is coring at 2,623 feet. In Section 16, J. J. O'Brien has cemeted the bottom of the hole in No. 1 Saxon after testing salt water at 2,658 feet and is shut down. Smitherman & McDonald have a rig up for No. 4-B Saxon, Section 5. F. A. Book's No. 3 Johnette, Section 33-15-16, has drill stem stuck at 2,280 feet. All except the latter test are in Union County.

Norphlet Area

In the Norphlet area, Gulf Refining Co. increased its gas reserve by a new well, No. 11 Berry, Section 6-16-15, which gauged 17,365,000 feet daily with a rock pressure of 245 pounds. It is producing from sand at 2,628-30 feet. Hollifield and associates' No. 3 Murphy, Section 9, has 1,400 feet of oil in the hole from sand at 2,395-97 feet and will be put on the pump. E. M. Jones' No. 2 Alphin, Section 4, also is to be put on the beam, it having 800 feet of oil in the hole from a sand at 2,346-51 feet. No. 3 Alphin has been completed pumping 250 bbls. from sand at 2,352-57 feet. This operator's No. 10 Murphy, Section 17, is blowing with air 140 bbls. of oil, and 660 bbls. of salt water from a sand at 2,523-28 feet.

Lion Oil & Refining Co.'s No. 6 Hays, Section 4-16-15, is drilling at 1,960 feet. Magnolia Petroleum Co.'s No. 3 Murphy, Section 8, is coring at 2,599 feet. Natural as & Fuel Corp. has cemented 6⅝-inch casing at 2,368 feet in No. 4-C Lawton, Section 10. Southern Crude Oil Purchasing Co. is setting a lead seal on top of the 6-inch casing at 2,675 feet in No. 5-A Wells, Section 15. Stewart and associates have perforated the casing at 2,409-11 feet in No. 8 Murphy, Section 9, and are pumping 45 bbls. of oil and 255 bbls. of salt water from that level. This is the well which was completed last April at 2,788 feet, the fourth sand level, flowing 1,000 bbls. of oil. Unity Petroleum Co. is arranging to deepen its No. 12 Roper, Section 3, which was completed in September, 1925, flowing 750 bbls. of oil and 20,000,000 feet of gas. This company's No. 15 Roper has 70 feet of oil in the hole from a total depth of 1,978 feet.

Ouachita County

In Ouachita County, Exchange Oil Co.'s No. 7 Berg, Section 4-16-15, tested salt water at 2,357 feet and is to have the casing whipstocked. In the same section, Marine Oil Co. has a location for No. 5-A Hays. This company's No. 10 Snyder, Section 34-15-15, has been completed pumping 120 bbls. of oil and 80 bbls. of salt water from sand at 2,354-64 feet. This company's No. 13 on this lease has 6-inch casing cemented at 2,623 feet. A derrick is up for the fourteenth test. Phillips Petroleum Co.'s No. 15 Joyce, Section 33-15-15, is drilling at 2,650 feet. Sam Richardson's No. 2 Rhoten, Section 32-15-15, has milled out casing at 1,750 feet and is drilling at 1,915 feet. Sunny Jim Oil Co. has cemented 6⅝-inch casing at 2,361 feet in No. 15 Berry, Section 33.

Stephens District
(Ouachita-Columbia Counties)

Buffalo Oil Co. is drilling the 6-inch plug cemented at 1,987 feet in No. 3 Culp, Section 22-15-19. Magnolia Petroleum Co. is fishing for a bit and collar in No. 1 Morgan, Section 7-15-19. It has just completed fishing out drill stem dropped in the hole at 3,030 feet. These tests are in Ouachita County.

Nevada County

Ames & Zing are drilling at 500 feet in No. 1 Wommack, Section 10-14-21, after having set 12½-inch surface casing at 20 feet. Autrey Oil Co. has a derrick up for No. 2-A Martin, Section 6-14-20. No. 2 Martin, same section, has completed making 5,000,000 feet of gas from sand at 1,161-69 feet. Burnham and associates are drilling around 600 feet in No. 1 Miller, Section 12-15-22. Holmes and associates have abandoned No. 1 Wallace, Section 11-14-21. No test was made. J. J. O'Brien's No. 1 Martin, Section 6-14-20, has been completed pumping 160 bbls. from sand at 1,159-67 feet. This operator also is bailing his second test on this lease with a sand at 1,154-59 feet. No. 1-B Moss, Section 1-14-21, has been completed pumping 200 bbls. from sand at 1,150-61 feet. Six-inch casing is being set at 1,159 feet in No. 2-B Moss. A derrick is up for No. 3-B Moss. In Section 12-14-21, Zing and associates have a new well, their No. 2-A Moss, pumping 125 bbls. from sand at 1,165-69 feet.

LA.-ARK. WILDCATS

(Continued from Page 46)

Dorado, Camden and Smackover Field operations.

NORTH LOUISIANA

Bossier Parish

Doern and associates are reaming to make a Halliburton test of sand at 3,148 feet in No. 1 Thomas, Section 10-22-11. A showing of gas is claimed. Sligo Syndicate's No. 1 Jeter, Section 23-17-12, is being bailed for another test at 4,272 feet. This test showed 2,000,000 feet of gas at 4,152 feet.

Magnolia Petroleum Co.'s No. 1 Rogers, Section 21-23-12, Carterville district, is drilling chalk rock at 2,430 feet. Simms Oil Co. is moving in a rig for its first test in this district. It will be on the Dodson land, Section 15. The Texas Company's No. 1 Mays, Section 27, is shut down for boiler repairs after drilling to 2,685 feet. Woodley & Collins are drilling at 1,200 fet in their No. 1 M. A. Farrington, Section 22. In Section 23, on the J. S. Farrington farm, these operators are down 450 feet where 12½-inch casing has been set. Woodley & Collins also are drilling another test in this section but on the Matlock farm. The latter test, the No. 1, is down 803 feet where the second string of pipe has been cemented.

Caldwell Parish

Grayson Oil Co. has abandoned temporarily No. 1 Crockett, Section 6-12-4. The hole is down 2,692 feet.

Catahoula Parish

Lochnager Oil & Gas Co. is drilling plug at 3,090 feet in No. 1 Bessley, Section 26-9-6e. This is the test in the Sicily Island district which made a sen-

sational blowout last February estimated at 20,000,000 feet of gas daily. However, after the gas was killed and casing cemented, high water prevented further operations until now.

Claiborne Parish

Magnolia Petroleum Co.'s No. 1 Lee, Section 16-22-8, is coring at 3,900 feet.

DeSoto Parish

Clark & Melat are drilling at 1,870 feet in No. 2 Payne, Section 12-11-16. Chal Daniel has cemented 10-inch surface casing at 40 feet in No. 1 Frost Johnson Lumber Co., Section 1-11-16. Dixie Oil Co.'s No. 1 Jenkins, Section 9-12-11, is drilling at 5,401 feet. Seip and associates have completed No. 1 Roberson, Section 18-10-12, flowing 18 bbls. daily through 2-inch tubing from a broken sand at 3,183-94 feet. The Texas Company is reaming to the bottom at 2,501 feet in No. 15-C Sample, Section 36-13-12.

Franklin Parish

Barbour Oil Co. is arranging to deepen No. 1 Baker, Section 3-15-7e, after testing salt water at 2,796 feet. Cowell and associates are drilling below 200 feet in No. 2 Moore, Section 12-11-6e.

Grant Parish

Holmes and associates are drilling at 1,410 feet in No. 2 fee, Section 17-9-1e. Swope and associates have completed No. 2 fee, Section 18-9-1e, pumping 200 bbls. of oil and 200 bbls. of salt water from sand at 1,601 feet. No. 4 fee is down 280 feet with 10-inch casing at 100 feet.

LaSalle Parish

Tunica Petroleum Co.'s No. 32 L. & A., Section 9-7-2e, has been completed blowing with air 2,000 bbls. of salt water with only a slight oil color. Total depth is 769 feet. This company's No. 33 on this lease is pumping 5 bbls., 60 per cent salt water, from a total depth of 774 feet. The location for No. 36 on this lease has been abandoned, and No. 37, Section 8-7-2e, has been abandoned after testing salt water at 805 feet. No. 1 Whatley, Section 9, has been completed pumping 10 bbls., 90 per cent salt water, from sand at 830 feet.

Natchitoches Parish

Ohio Oil Co.'s No. 2 L. & A., Section 26-13-6w, tested salt water with a Graham tester at 2,262 feet.

Rapides Parish

Seip and associates are drilling at 1,545 feet in No. 1 Brewer & Neidsted, Section 38-3-2e.

Red River Parish

Alden Oil Co. has abandoned No. 1 Powell, Section 13-11-10, after drilling to a depth of 2,838 feet. Hazlett & Simmons are plugging back to the gas sand encountered at 1,712 feet in No. 1 Neeley, Section 1-14-12. This sand tested 2,000,000 feet of gas several weeks ago but the hole was deepened to 1,740 feet. Salt water was tested at 1,715 feet. The Texas Company's No. 36-B Brinkerhoff, Section 30-13-10, is drilling chalk rock at 1,432 feet.

Richland Parish

Gulf Refining Co. is drilling at 421 feet in No. 1 Ouachita National Bank, Section 25-17-5e. This company's No. 2 Rhymes, Section 5-16-6e, has been completed at 2,420 feet gauging 44,042,000 feet of gas. This test had been drilled to a total depth of 2,880 feet and plugged back. Gulf Refining Co. is sidetracking drill stem in No. 2 Seibert, Section 11-16-5e, total depth being 2,491 feet. Ruston Drilling Co. has cemented 6-inch casing at 2,300 feet in No. 1 McCoy, Section 30-16-6e. No. 2 McCoy, Section 8, has 8-inch casing cemented at 878 feet.

Sabine Parish

Arkansas Fuel Oil Co. is arranging for a test of a formation at 3,352 feet in No. 8 Logan, Section 33-10-12. This is the test which blew out at 3,285 feet making an estimated 6,000,000 feet of gas. No. 9 Logan, this section, is drilling with cable tools at 3,280 feet. Magnolia Petroleum Co. has a rig up on the Hall farm in this section for its second test on that lease. In Section 32-10-13, Arkansas Fuel Oil Co.'s No. 10 Logan is drilling at 3,621 feet for a deep test. No. 1-A on the same lease is drilling at 2,812 feet. Foster and associates' No. 1 Nabors, Section 30-10-12, is drilling lime at 2,900 feet. Magnolia Petroleum Co.'s No. 1 Rembert, Section 32-10-12, has 6-inch casing cemented at 3,150 feet. Moffett and associates have a derrick completed for their second test on the Moore farm in Section 5-9-12. Morgan and associates' test on the Reese land in this section has been abandoned temporarily after drilling to a depth of 3,385 feet. A. H. Tarver's No. 1 Long Bell, Section 5-8-13, is down 204 feet where 12½-inch casing has been cemented. H. P. Tate is drilling at 2,498 feet in No. 1 Cook Land Co., Section 23-10-11.

All the above tests are in the Pleasant Hill Field. To the south in the Zwolle district, L. M. Emlet has set 8-inch casing at 2,502 feet in No. 7-B Bowman, Section 14-7-14.

Webster Parish

Shreveport-El Dorado Pipe Line Co. is drilling at 2,267 feet in No. 1 Gamble, Section 23-20-8.

West Carroll Parish

Phillips Petroleum Co. encountered a fresh water flow at 1,710 feet in No. 1 Marion, Section 32-20-9e. This has been killed and the test is drilling ahead. Palmer Corp.'s No. 1 Pioneer Cooperage Co., Section 16-20-10e, has been shut down for rig repairs.

Winn Parish

Ohio Oil Co.'s No. 1 Rolen, Section 9-12-1w, is drilling at 965 feet with the first string of pipe at 210 feet.

ARKANSAS

Union County

W. R. Keever is arranging to make a test at 2,883 feet in No. 2 Ezell, Section 12-17-15. This test was dry at 2,878 feet. Lion Oil & Refining Co. has abandoned as dry at 3,312 feet No. 1 Craig, Section 4-18-18. Magnolia Petroleum Co.'s No. 1 Caroll, Section 1-17-14, is drilling below 150 feet. Mazda Oil Corp. is drilling at 1,550 feet in No. 1 Boyd, Section 9-17-15. Ohio Oil Co. topped red beds at 2,943 feet in No. 1 Pumphrey, Section 1-17-14, and cored sandy lime and gumbo down to 3,040 feet. This test is running considerably lower than the No. 1 Cain, this section, which was completed in June pumping 50 bbls. of clean oil from a sand at 3,000-14 feet. Owenwood Oil Corp. is drilling at 200 feet in No. 1 Goode, Section 31-16-13. The 15½-inch surface pipe was set at 54 feet. Rice and associates are to deepen No. 1 Newton, Section 13-17-16, which has been shut down at 2,260 feet since May. Simms Oil Co. is pulling casing and preparing to abandon No. 1 Ballard, Section 9-18-13. It tested salt water at 2,665-73 feet. W. D. Wingfield has abandoned No. 1 Hadley, Section 2-18-13, it having been drilled to 3,090 feet.

Ouachita County

Magnolia Petroleum Co.'s No. 1-B Stout, Section 28-14-16, was swabbed dry in a sand at 2,095-97 feet, and after standing over night showed only a little very heavy oil and salt water. It has been deepened to 2,099 feet and another test will be made.

Ashley County

Glassell and associates are fishing for drill stem at 1,370 feet in No. 1 Keller, Section 10-19-5.

Clark County

Whelen Oil Co. is coring at 1,325 feet in No. 3 Burrows, Section 33-10-20.

Columbia County

Tunica Petroleum Co. is drilling shale and boulders at 1,620 feet in No. 1 Bodcau, Section 27-19-23.

Hempstead County

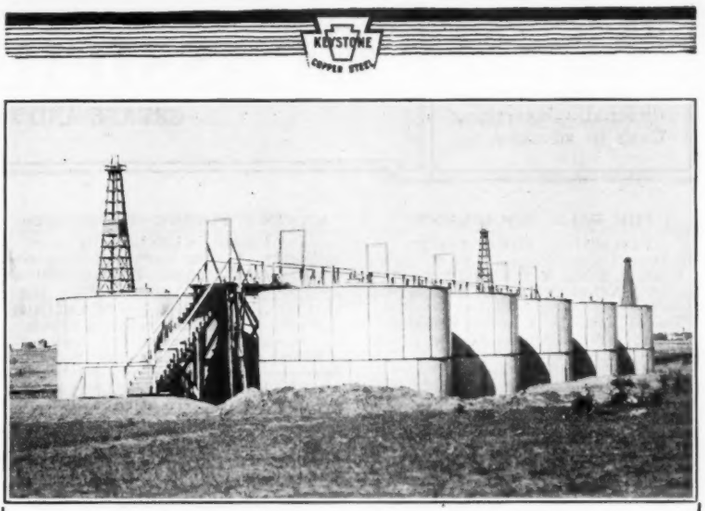
Arkansas Natural Gas Co. has junked and abandoned No. 1 Goodlet, Section 34-10-26, after drilling to a depth of 1,841 feet.

Lincoln County

Lincoln-Drew Oil Co. (Pine Island Oil & Gas Co.) is reaming to the bottom in No. 1 Carter, Section 33-10-6. Total depth is 2,020 feet.

TAX APPEAL DECISION

The Board of Tax Appeals at Washington has decided in the case of Alger Melton that a verbal agreement between owners of an oil lease to contribute in equal shares sufficient money to drill a well on a lease constitutes a joint venture and not a partnership.



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5 Dean Triplex Pumps, 5 by 8.
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Two 10-inch S. Roturbo Centrifugal Pumps. Six 10-inch S. Centrifugal Pumps. Steam Turbine.
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One Worthington Duplex compound steam pump 8 inch suction 6 inch discharge.
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One Sullivan Angle compound machine driven by electric motor, capacity 1,040 cubic feet per minute size 20 and 12 by 14 inches.
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The Oil and Gas Journal,
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WILL SELL or trade for real estate or anything of value. Two complete strings of drilling tools. Two Standard drilling rigs and casing. Five 100-bbl. welded steel tanks. One 15-H.P. Upright boiler. One 20-H.P. Bessemer gas engine, Wyco and reverse clutch. Geo. J. Herrly, 3680 Middletown Road, Corliss Sta., Pittsburgh, Pa.

FOR SALE at a sacrifice, 6 only, 122-foot, and 8 only, 82-foot McGraw, Baughman and Bearley Standard Turnbuckle derricks; on hand at Braman, Okla. If interested, write or wire G.H. Stevens, Room 1022, Mayo Bldg., Tulsa, Okla.

FOR SALE—One Ingersall-Rand "Imperial" type 10 steam driven air compressor. Used one month. Excellent condition. Priced right. Summerfield G. Roberts, 1805 Allen Bldg., Dallas, Tex.

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7—25-h.p. used gas engines.
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15,000 ft. 5⅛-in. used casing.
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75,000 ft. 3-in. used line pipe.
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For immediate shipment from our Texas yards.
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EQUIPMENT WANTED

WANTED—Good 30 or 32-inch lathe with 16 ft. bed, 3 step cone, double back gear, priced right. Okmulgee Gas Engine Co., Okmulgee, Okla.

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FOR IMMEDIATE SALE
Small refinery complete and ready to go. Located on P. R. R. at Tiona, Penna. Inquire of W. L. Brumbaugh at refinery.

COMPLETE Indiahoma refinery for sale, including six 55,000-bbl., one 25,000-bbl., one 15,000 bbl. and 50 other tanks, also stills, pipe, boilers, pumps, valves fittings, loading racks, etc.
HYMAN-MICHAELS CO.
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MANUFACTURING MACHINISTS

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Worthy of your confidence. General machine work. 1416 Walnut, Kansas City, Mo. Phone Harrison 7660.

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Machined to your drawings, Gears, Machinery designed and built.
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BUSINESS OPPORTUNITY

BERITE Chemical removes Paraffine from your oil wells and revives old wells. Write for circulars. J. Harmon, 14 Massa Ave., Mansfield, Ohio.

EXPERIENCED Oil Operator, owning standard rig and tools, now engaged in drilling wildcat wells in Texas, wishes to form an association with individual or oil company, capable of assisting in the financing of new wells, on large blocks of acreage, and the purchasing of semi-producing properties; man with legal training preferred; references exchanged. Box B-960, The Oil and Gas Journal.

PARTY to join me developing, marketing this winter my Sarasota Bay water frontage. Over ¼ million profit. $50,000 required for ½ interest. Money for development.
EDWARD R. LIST
Sarasota, Fla.

WANT TO HANDLE

Mid-Continent Sales of good products on straight percentage basis. Prefer products used in refineries, pipe lines and natural gasoline plants. Well able to finance sales. Send descriptive literature with reply to Box B-956, The Oil and Gas Journal, Tulsa, Okla.

INVESTORS' SERVICE
Latest authentic information and advice on Seminole area FREE. Small investors carefully and properly advised. Wire or write.
W. S. SYMONDS
313 Mid-Continent Bldg., Tulsa, Okla.

EASTERN CAPITAL wants to buy commercial gas producing properties or finance gas pipe line. $1,000,000 or upward. Anderson, 712 Linz Bldg., Dallas, Tex.

PETROLEUM PICTORIAL FOR 1923-4-5-6.
All about oil, economics, finance, geology geogr., human el., Latin, Am., mechanism, operators, world trade, etc; panaroma; late and basis facts condensed; 400 large pages, 250 illustrated; 6 books in 1; $4. Agents wanted. Oildom Author, 996 Drexel Bldg., Phila. Pa.

DESIRE TO connect with party experienced every phase oil business in St. Louis territory, deliveries in tank trucks and tank cars from storage plant. Must be able take financial interest. Address Box B-970, The Oil and Gas Journal, Tulsa, Okla.

HAVE 10,000 acres Delta County, Texas. Desire drilling contract on this block.
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TAYLOR BROS. & TOWNSEND,
Cooper, Texas.

FIVE WELLS make 980 bbls. Parties with a little money willing to take an oil mans chance drilling in rich shallow field, with tremendous possibilities. Write Box 336, Owensboro, Ky.

PAMPA, TEX.—Heart of Panhandle Oil Field; visit Texan Hotel, modern, reasonable rates; dining room.

WILL PAY CASH
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Must have gross sales not less
One Hundred Thousand Dollars
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CAPITAL—An experienced dependable broker with following will aid in financing a worth while proposition. B. W. 810 Broad St., Newark, N. J.

FINANCE your project with stock bonded. Quickest and most satisfactory known method of raising capital. Information free. Bankers Interstate Security, Electric Bldg., Denver, Colo.

OIL MEN—come to our new field in McKinley County, New Mexico. Three known producing sands from 300 to 1,800 feet, good drilling and high gravity oil. If you have the tools we will finance you if desired or give you acreage free to drill the Hospah Structure. Production practically sure in all tests. Box 611, Albuquerque, New Mexico.

MANUFACTURERS needing capital on small bond issues, investigate my proposition. Extensive clientele. Commission basis. Write G. Pickhardt, 4631 N. Racine Ave., Chicago, Ill.

WE CAN furnish necessary capital for development of good oil and mining properties. Let us solve your financial problem. Highest references
LINCOLN ORGANIZATION
360 North Michigan Avenue
Chicago, Ill.

WANTED

WANTED oil royalties, leases, fee lands. Give lowest price, description. American Oil Co., San Antonio, Tex.

WANTED—WET GAS CONTRACTS
We want wet natural gas for casinghead plant. Will start erection immediately. Give volume, gasoline content. Contract Dept., Wm. H. Allen, 1215 Detwiler Bldg., Los Angeles, Calif.

WANTED—Shallow lease in Oklahoma with locations to be drilled. Give all data in first letter. Box 800, Muskogee, Okla.

AM INTERESTED in buying two or three small producing oil leases from 6 to 10 bbls. per day of settled production. Preferably in either Montgomery or Chautauqua Counties, Kansas. Give full description of lease and other information full and complete. Will pay cash for lease and must be worth the money. Lock Box 292, Chautauqua, Kans.

POSITION WANTED

REFINERY Accountant & Office Manager, 31 years of age, seven years experience; University training; now employed; wishes change. Box B-952, The Oil and Gas Journal, Tulsa, Okla.

PURCHASING AGENT with fifteen years experience buying for refineries, producing companies and coal mines, also has had accounting and railroad traffic experience. Now employed by one of the largest oil companies, desires new connection as general purchasing agent; not interested in position as confirming agent or order placer where someone else actually does the buying. Can give the best of references. Married. Forty-three years old. Will locate anywhere. Box B-963, The Oil and Gas Journal, Tulsa, Okla.

ACCOUNTANT with oil country experience. Several years experience as public accountant and auditor working among large oil companies. Past five years with large company as secretary handling both office and field work. Conversant with both rotary and cable drilling as well as production and pipe line operation. Want immediate connection either office or field work. Box B-941, The Oil and Gas Journal, Tulsa, Okla.

PRODUCTION or drilling supt. 20 years' experience with cable and rotary tools in Okla., Ark., La. and Texas. Handle any kind of pumping or air production. Best reference. Box 56, Tullos, La.

C. A. KNIGHT, recently returned from South America after completing contract as Refinery Superintendent with Bethlehem Steel Co., wishes to make a connection with some Company as Superintendent or in an Engineering capacity, Address; Care Vickers Petroleum Co., Wichita, Kansas.

POSITION WANTED

YOUNG MAN—A. M. degree in geology, one year experience with large oil company in foreign work desires position with individual producer or small company. References exchanged. Box B-972, The Oil and Gas Journal, Tulsa, Okla.

HELP WANTED

WE ARE interested in securing competent sales engineers who are familiar with power equipment for the oil fields. Write to Box B-967, The Oil and Gas Journal, Tulsa, Okla.

JOBBER SALESMAN on grease. If you can sell carloads of cup transmission and high pressure greases to jobbers, we have open territory in several states. Salary basis. Replies held in strictest confidence. Panhard Oil Corp., 17 Water Street, New York City.

GET THE JOB you want through National Service, 10 Murray Street, New York.

FOREIGN WORK MEN interested in oil, mine, railway work, etc., in South America; write at once. South American Service Bureau, 14,600 Alma, Detroit, Mich.

FOREIGN WORK
Men wanting work with the large oil companies in foreign fields write immediately to the Foreign Service Company, Cotton Exchange Bldg., Fort Worth, Tex.

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Tulsa, Oklahoma

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35 CENTS a line first insertion; 25c a line each additional insertion. Cash in advance.

CLASSIFIED WANTS

CREATE AND BUILD BUSINESS

MAIL your advertisement now. It will be published next week. Cash with order.

LEASES—PRODUCTION

10,240 ACRE government permit drilling block Eddy County, New Mexico for small cash bonus and 2,500 ft. well. Now has old 700 ft. gas well on same.
WYLIE-BLINEBRY, Inc.,
319 Martin Bldg., El Paso, Texas.

THE HOSPAH STRUCTURE of McKinley County, New Mexico is proving a Wonder New Field. Three known producing sands ranging from 300 to 1,800 ft. and producing from 10 to 1,000 barrels per day. Practically all the Major companies operating in this State are interested and drilling. We control the Field and to induce others to help develop our holdings, will join you or give acreage free for a limited number of tests, to those who have rigs or can get them. Box 611, Albuquerque, New Mexico.

WEST TEXAS ACREAGE
Several ten thousand acre blocks on drilling contracts. One 15,000 acre block for a well.
Production in Texas at prices and terms never before offered.
GEO. R. SLENTZ
404 Capps Bldg., Ft. Worth, Tex.

WE HAVE a twenty five hundred acre block on structure in Anderson County, Texas for well. We have many, best lease buys, in U. S., especially in Grady County, Okla., which indicates another Seminole pool. Write for a special Lease Bargain and picture of a Grady County gusher. We want to make connection with first class broker to syndicate a well on proven and semi-proven acreage. We have good contract to offer. We give highest Bank and Chamber of Commerce reference. Commerce Development Co., 1st Nat'l. Bldg., Chickasha, Okla.

HAVE SIX large blocks in southern Crockett and northern Val Verde County, big play already started. Don't delay. Prices $1.25 to $2.00 per acre. L. G. Graves, 19 So. Chadbourne St., San Angelo, Texas.

FOR SALE—Some small high gravity production in the shallow field of Wagoner County, Oklahoma. S. M. Twine, 200½ So. 2nd St., Muskogee, Okla.

LEASES, Royalties and Drilling blocks in Eastland, Stephens, Callahan, Coleman and Brown Counties. Noell and Gray, Garner Bldg., Cisco, Texas.

"IN THE TREND"
Southeastern New Mexico and West Texas counties — Lea, Eddy, Chaves Gaines, Andrews, Winkler, Loving, Ward, Culberson and Pecos Counties, oil and gas leases, royalties and drilling blocks. We buy and sell. F. S. Blackmar, P. O. Box 541, Roswell, N. Mex.

WINKLER—PECOS COUNTIES
Leases and Royalties
W. S. PATTERSON
Pecos, Texas

WILL LEASE 2,000 acres Major and Dewey Counties, Oklahoma, and give one-half royalty; $1 acre. J. D. Jones, 918 E. First St., Tulsa, Okla.

FOR SALE—1,900 acres oil leases near Heritage and Red Boiling Springs, NE cor. Macon County; NW cor. Clay County, Tennessee; 25 cents per acre. E. C. Silvers, Leesburg, Ind.

2,000 ACRES adjoining Standard Oil's 4,000 barrel well at Walden; will sell all or part or will lease; also have 150 barrel well at Florence on 480 acres. Apt. 10, 325 East 18th Ave., Denver, Colo.

FLORIDA OIL AND GAS LEASES
Have 2 large well located oil and gas leases; said to be on best structure in Florida. Wish to arrange with good responsible driller to drill these properties for large percentage of leases. I. N. Barry, Prospect and Guinotte, Kansas City, Mo.

FOR SALE—Leases and production in Warren, Allen and Barren Counties. Have leases in Barren County joining producing leases and some within half-mile to 1 mile of production. W. P. Harley, Bowling Green, Ky.

LEASES—PRODUCTION

NEW MEXICO LEASES
Leases bought and sold any part of state. Inquiries replied to promptly; maps. William U. Tate, Francisan Hotel, Albuquerque, N. Mex.

OIL LEASES—Low priced; large and small tracts. Texas. 13,000 a. S. Edwards Co. and 18,440 N. Kinney Co.; each at $1 for 10 year paid up lease. 6,000 E. Valverde Co. 10 year lease, paid up, at $1.30. Brewster, Presidio, Blanco, Jeff Davis, Pecos, Terrell. Make known your wants. Cheap fee titles. Samuel H. Smith, San Antonio, Tex.

SOLD ⅔ undivided interest 10 acres, $2,000; ½ mile well made 1,000 bbls. and sanded up, shut down; will sell other ½ interest. $500, lease and abstract care your bank. Going to South America. Box 449, Eldorado, Kans.

CHAUTAQUA Co. Kans. N. E. ¼ Sec. 12, 32 R 12 Improved Never leased. New York owner says sell it. A wonderful gas and oil prospect at half farm value. $50 per acre. Look it over. Write Mr. Ross, 204 Huntzinger Bldg., Kansas City, Mo.

SOUTHEAST Lea, Winkler, Loving and Gaines 1,000 acres for lease; all sizes and prices; 4,600 acres of royalty, all prices; good buys; close to production. I buy and sell. R. R. Winningham, 902 W. Second St., Fort Worth, Tex.

FOR SALE—13 acres, Sec. 22-17-4, Lost Springs, Marion County, Kansas. Near four good oil-producing wells. Will lease or sell. Owner, George Vest Tussey, 4367, Oakenwald Ave., Chicago, Ill.

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FOR SALE—At bargain price oil and gas lease on 320 acres; 80 acres in Allen County, Kans., E½ SE¼ Sec. 27 T24 R21; 240 acres in Bourbon County, Kans., NW¼ & N½ of NE¼ Sec. 26 T24 R21 leases adjoins, with 18 producing shallow wells and about 20 locations to be developed. Write W. H. Quigley, 1506 Linwood Blvd., Kansas City, Mo.

NEW MEXICO oil leases; Lea, Eddy, Chaves, Union, Quay and all other active counties; complete list and map on request. Orcutt-Harris & Co., Colcord Bldg., Oklahoma City, Okla.

RIGHT IN THE TREND—
BREWSTER COUNTY
FIVE-YEAR PAID UP OIL AND GAS LEASES
CLOSE-IN TO DRILLING WELL
I am drilling at 650 feet about 10 miles southwest of Alpine, Brewster County, on geology approved by I. J. Broman. I offer some choice five-year paid up oil and gas leases close to my well, or spreads at a low price. Write for full particulars immediately. Location looks similar to Yates Pool—right in the basin with plenty of outcroppings that can be worked geologically. Invest from $50 to $5,000 at special low price.
VAN McPHAIL,
1211 Fort Worth National Bank Bldg.,
Fort Worth, Texas.

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Genuine opportunity to secure 2,560 acres for a well in the San Juan high gravity field close to production. Fuel and water on the ground. Price $2.50 per acre. Address P. O. Box 1195, Sapulpa, Okla.

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Drilling blocks, Leases, Royalties.
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LEASES and half royalties, Caddo, Blaine and other counties. Write for complete list. A. E. Baldwin, Anadarko, Okla.

TEXAS OIL LAND—Have 10,000 acres; lease or part for drilling. Center of activity. Owner Box 944, Long Beach, Calif.

LEASES—PRODUCTION

TEXAS LEASES, royalties offered at bargains. Coke Co. 50 cents; Shackelford Co., $10; Throckmorton Co., $5, and many others. Send for list. National Land Co., San Antonio, Tex.

FOR SALE—One-sixteenth interest in 700 acres all proven shallow leases and 7 producing oil wells, located in Indiana. Purchaser receives check direct from pipe line for oil sold. Priced to net around 20 per cent and with great future possibilities. Address Box B-962, The Oil and Gas Journal, Tulsa, Okla.

PANHANDLE, East Texas and New Mexico leases $1 up. Drilling blocks. Want low priced royalty anywhere in West Texas. Anderson, 712 Linz Bldg., Dallas, Texas.

MOORE COUNTY, TEXAS
Section 308, Block 44, 8 miles SW Morton producer, 3 miles NW townsite well 2,500 feet showing gas. Write owner, Box 253, Amarillo, Texas.

OIL LEASES and royalties, Ector, Crane, Pecos, Reeves, Ward, Upton and Winkler Counties; buy or sell. C. H. C. Anderson, 712 Linz Bldg., Dallas, Tex.

ROYALTIES—PRODUCTION

GOOD BUY producing royalty, Upton County 2,900 bbls. daily. Three more big wells expected, in two weeks. Act quickly. L. G. Graves, 19 So. Chadbourne, San Angelo, Texas.

AUTHENTIC list of buyers of Oklahoma Royalty, 1926-27, 85 per hundred. Other good lists. Russell Adams, Guthrie, Okla.

FOR SALE—One-half interest in royalty (not leased) in Bandera, Kinney and Edwards Counties, Texas, $1.50 per acre. Address Box 531, Tulsa, Okla.

ROYALTY—80 acres, Seven North, One East, Cleveland County, Okla. Interests $25 up. Surrounded by tests nearing completion. Oil showing. F. W. Baum, 619 E. Pacific St., Springfield, Mo.

ONE-EIGHTH royalty and fee title, SE 4-24-19-4, Logan County, Okla. Wire offer. B. H. Dooley, Red Lake, Minn.

FOR SALE—Undivided one-fourth interest in the mineral rights in 80 acres in Latimer County at $1 per acre. Jasper N. Butler, Poteau, Okla.

PRODUCING royalty in Smackover Field, Arkansas, for sale, a ¼ undivided interest. Box B-966, The Oil and Gas Journal, Tulsa, Okla.

J. F. MARION OIL COMPANY
Magnolia Building
Dallas, Texas
Buys and sells Texas Oil Leases and Royalties

NOTICE
Offering undeveloped and producing royalties, leases and drilling blocks, Brown (Fry Field area), Coleman, Callahan and Shackelford Counties, Texas.
All offerings submitted will be accompanied by geological information.
M. ELDER & COMPANY
Coleman Hotel Bldg., Coleman, Tex.

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Before disclosing your invention to anyone, send for blank form.
Evidence of Conception
Bulletin "How to Establish Your Rights" and complete information free.
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FOR SALE—DOGS

PEDIGREED German Police pups; papers furnished. Price $25 up. Dr. W. P. Sims, Thrift, Texas.

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CHARTERS—Delaware best, quickest, cheapest, most liberal. Free forms. Colonial Charter Co. Wilmington, Del.

DELAWARE incorporators. Charters fees small, forms. Charles G. Guyer, 901 Market St., Wilmington, Del.

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Settlement of two non-resident estates forces sale of 6,853 acres good prairie and timber land, in rainbelt, mild winters, healthful summers, within 3 miles of three main line railroad towns. On principal gas structure of South Texas, with gas indications on all sides. Nearly all surrounding land leased to oil companies who have negotiated for this; one test drilling. Encouraging geological report. Millions of profit possible. F. W. McKay, Rosenberg, Texas.

KNOCKING AT YOUR DOOR. 22,000-acre ranch, Travis County, Texas. Splendid improvements. Forty minutes' drive State Capitol. Fine grass, no stock for two years, abundance of water, oil prospect, not leased. Better act. Other bargains. Stallings & May, Clyde, Texas.

RIO GRANDE VALLEY
200 to 700 ranch land. Also 5 and 10-acre bearing citrus fruit. Orchards, some great bargains. Write me. M. C. G., 1438 S. 12th St., McAllen, Texas.

SUMMER RESORTS

OZARKS—River front bungalow sites; $100, $5 monthly. Other bargains. Aug. Zimmerman, 1802 N. Fifth, Kansas City, Kans.

WRITE E. R. RUGGLES, PROP. of Hotel Idlewilde, Osakis, Minn., for booklet; 26 years experience in satisfying the Southern tourist. One of the founders of the Ten Thousand Lakes Association. Modern hotel and cottages. American plan. Splendid fishing. Accommodate 150 guests.

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4 lines	1.40	2.40	3.40	4.40
5 lines	1.75	3.00	4.25	5.50
6 lines	2.10	3.60	5.10	6.60
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Chicago Spot Demand Fair, Price Easy

Large Business at Least Went at Six and a Half Cents. Buyers Inquiring About Furnace and Fuel Oils

By J. B. Waldo

CHICAGO, Aug. 8.—There was a very fair demand for gasoline in the spot market today and several inquiries for considerable quantities were received from large distributors. The price situation was easy, as several of the large refiners had made a price to the trade of 6½ cents for U. S. Motor gasoline and others were quoting at 6¾ cents but meeting all competition from responsible sources, so that the large business at least went at the 6½-cent rate. There was practically no demand for any grade of lower gravity than the motor grade and only occasional cars bought of a higher gravity, the prices for these grades being easy in sympathy with the general gasoline situation. The demand for kerosene was fairly active at unchanged prices with an extreme range of 4 to 4¼ cents. There was little activity in any of the furnace or fuel oils, the bulk of the spot demand being for immediate use and in small quantities. Many inquiries were made regarding prices and terms for future supplies, but the buyers are still unwilling to contract for future needs except on the basis of the present market or lower, while refiners and marketers are just as unwilling to accept the business on the terms offered. Reports from various parts of the territory note a continued good consumption over the week and which seems likely to continue for several weeks, but the competition is stated to be increasing right along. Locally several distributors have advertised that they would absorb any tax, in some cases without any conditions and in others that the motorist must buy his lubricating oils where he bought his gasoline to secure this reduction in price.

Rumors Alone Active

There was no great activity in this market last week, unless it was in the way of rumors and of these there were a large crop, only a few proving to have any substance in the way of actual fact back of them. The very size of the market and the fact that such a large territory is tributary to it either wholly or to a less extent for some or all of its petroleum supplies, makes it a sort of center for reports of all kinds. Chicago was primarily and still is a very large distributor of petroleum products of all kinds. It is only recently that it has developed into importance as a refining center. As stated some weeks ago, the ability of the local refineries to supply the surrounding trade is constantly growing with the accession of such plants as that of the Roxana Petroleum Corp. at East Chicago, and the constant additions being made to other refineries near this city and shipping their product to the dealers and consumers in tank car lots in all parts of the surrounding country.

It is not so long ago when train load orders were received for delivery to as distant points as the New England States. Local concerns have until recently maintained offices at Pittsburgh, Buffalo, Cleveland, Detroit and other points in Eastern Ohio, western New York and Pennsylvania and elsewhere to the east of the city. They could ship the product of the Oklahoma refinery to these points and sell in competition with other refiners who sold at these trade centers.

But several concerns may be recalled at having very recently given up their offices in the Eastern cities because they could not compete with near-by plants or refineries so situated as to have more favorable freight rates. One refiner has within a couple of months withdrawn its men at Detroit and Pittsburgh, another is giving up its office at Cleveland. Part of the reason for these changes have come about because of the freight rates but as yet rates are no more unfavorable than they were last year and these offices could do business last year at a profit. It seems to the local managements that the most effective competition in these territories comes from refineries of the Middle West, from Illinois, Indiana, Ohio and Kentucky. And there is always the eastern plants to be considered as they will ship their product even from the Atlantic seaboard as far west as Cleveland or Detroit just as soon as the price of the Group 3 refiners is at all advanced.

Important Refinery Center

The Chicago district is becoming more and more a refining center of considerable importance as well as a very large distributor of petroleum products. It is less and less a distributor of the products of distant refineries and as an industrial center is selling more and more the products of plants situated right at its front door because there are more and larger plants to draw upon. The refining capacity of the Middle West has increased more rapidly than the consumption and these refiners are serving a wider territory and their competition is being more keenly felt by the refiners of the more distant centers. So it seems to many of the active sellers of refined products in this city.

Freight rates have had much to do with the growth of the refining industry in this section and the present tendency of rate making is apparently in favor of the plants east of the Mississippi River as compared with those of the Southwest. Another factor in favor of the Middle West plants is that they are near to their consumers. If a buyer of any product needs supplies in a hurry, quicker delivery can be had from the near-by plant. Local refiners are making the most of this advantage and it is quite an advantage in these days when the prevailing trade plan is to let the refiner carry the stock and hustle the wanted commodity along. The other plan of having cars in transit meets requirments sometimes but if the demand happens to be active for near-by cars, there is not enough of them and if the opposite is the case, the excess of these cars results in active efforts to sell them, sometimes at the expense of market price stability or else there are demurrage charges.

Spot Market Inactive

There was little real activity in the spot market last week. Buyers are still holding to their plan of ordering for a week at a time and so many of them have all the gasoline they can sell coming to them on contracts that they do not need to buy additional supplies. If they do the refiner holding their contract is usually glad to add the needed cars to his contract. Really the spot market has become through the growth of the contract system a place where excess of demand is met by excess of supplies and the comparatively small movement as compared with the total volume of the gasoline business makes it very readily influenced by comparatively small quantities of material. The demand the first part of last week was very hesitating owing in a great measure to the cut in Pennsylvania crude. To many oil men it pointed directly to lower prices in Mid-Continent crude. The crude actually reduced in price really is not a source of gasoline to any important extent. It is too valuable for other purposes to be run with the idea of making gasoline from it. Neither is the volume of crude of any importance in the list of material for motor fuel. But the jobbing industry is awake nights to find causes for worry and the strain is getting on the nerves of a good many. So they jumped at the conclusion that important changes in the crude price list impended and they withdrew from the market for everything that they did not actually have to have.

Meeting Competition

This, of course, was reflected in the demand on the refineries and there were some low prices made to move supplies. As buyers were taking only what they actually needed the low price did not increase the sales a single gallon but they shifted what demand there was for spot gasoline to the refiners that went after the business with a low price bait. Some concerns were able to buy at 6⅜ cents. in quantities for prompt shipment. One bought several hundred cars and sold 150 of them immediately at 6⅝ cents. Quite generally the wholesale dealers were able to buy at 6½ cents and the price, to such dealers most of the week was never over 6⅝ cents. Local refinery offices selling direct to the trade and not hesitate but in most cases adopted the plan of "Meeting legitimate competition." Some very large concerns did this and said that they had to, to get the business. Only in a few instances was the price held at 7 cents and that price did not get any volume of business. Later in the week, the feeling was better largely because on second thought the trade realized that the reduction in the Pennsylvania grade crude did not necessarily mean a reduction in other crudes. To the careful observer that action of the Ohio Oil Co., in reducing but one grade and that the Wooster, indicated that the reduction would be confined to one section of the country at least for the present.

Much Consumption Ahead

Another strengthening factor was the realization that the consumption of gasoline would continue on a large scale for weeks to come. There is still practically all of August, by past experience the peak month, then September which during a record kept for many years is often as good a gasoline month as July. Even October is frequently a better month for gasoline consumption than June. The years when the motoring season extended from Decoration to Labor Day is past. At the close of last week the market for the U. S. Motor gasoline was a flat 6¾ cents with only occasional variations from this figure. The market for the higher gravities was easy in agreement with the general situation in gasoline and prices were somewhat lower. The larger demand in these grades is for the 60-62-400 end point and this was held practically at 7 cents to the trade with the 64-66-375 end point at 7¼ cents. The purchase of a large Detroit distributor by a refining organization that has specialized on the higher gravities is stated by the local office of the refining organization to take them out of the market as a source of supply for the 60-62-400 end point grade. Natural gasoline is firm and fairly active here but practically unchanged in price.

Kerosene Steady

Kerosene is moving steadily if not largely. The business doing is just seasonable. Some demand from the harvesting of the earlier crops is reported and September is expected to be a better month than August. There is no difficulty in securing supplies and there is only an occasional refiner that is seeking business on this product. The approach of the season for more active buying of distillate is thought to be in part responsible for the steadiness in the kerosene market.

The spot market for distillates is unchanged with a few cars moving at 3 to 3⅜ cents. The activity in the market is in the placing of contracts or deals of some sort for stocking up for the coming season. There is little likelihood of any high prices being paid over the season. Here is a proposition that was put up to a refiner last week. The distributor proposed to buy 100 cars of 38-40 distillate, low flash and cold test. He would pay cash at the present market price. In return for the use of the cash the refiner was to carry the distillate in his tanks and to ship as wanted by the buyer. At a fair price it might not be such a bad deal for the refiner and it certainly would be a good deal for the buyer. All sorts of propositions are being made and occasionally one goes through but most of them fall down on the value placed on the distillate. Practically there is a difference of opinion as to the price that should be paid of a cent at least. Buyers believe that they are paying a fair price at the present range of 3 to 3¼ cents. Refiners say that by waiting until a little later they can certainly sell at 4 cents or better. The majority of the contracts made so far are based on the market date of shipment. There is no change in specifications. The desired distillate is the 38-40 gravity with a flash of 175 degrees or better and a zero cold test.

Gas Oils Weaker

Gas oils are not quite so strong, being freely offered at a price slightly lower than a week ago. The demand is just about seasonable. The gas companies are not using as much gas oil as they did, changes in their processes having reduced the quantity necessary for the sufficient enrichment of the gas. They are still using a lot of gas and fuel oils and the demand from this source would be sadly missed. U. G. I. specification oil is being handled here at 2⅝ to 2¾ cents with the zero oils at 2¾ to 2⅞ cents. The straw gas oils are more strongly held than the straight run or the dark cracked gas oils. One refiner described his gas oil as a dark blood color and this was said to mean that the oil would be black but it made no difference to this buyer. One local dealer had an interesting experience that may suggest why gas oil is being more plentifully offered. The product of a refiner pleased his customers and he tried to buy a number of cars but the refiner said that the gasoline market was looking better and he thought they would soon start their cracking stills. No gas oil for sale. A little later he was asked if he still had no gas oil for sale and let go of ten cars. A little later he offered to complete the order that he had turned down a few weeks previously. There the matter rests but that dealer says that when that refiner tries as he will, to sell him some gas oil it will be at the dealer's price. There is very much the same demand from distributors for gas oil that there is for distillate. Most of the distributors will stock a good distillate or furnace oil and a good gas oil for domestic fuel oil and that is all. There is a demand for the gravities lower than 32-36 gravity but the oil must have a flash of 190 or better and a low cold test and there is not much of it to be had now, and there is no saving in the price as compared with a straight run gas oil with a fairly low cold test.

Fuel Oils Easier

Fuel oils are somewhat lower in price than a week ago and decidedly easier in tone. One local dealer said last week that he visited with nine refiners some by long distant phone, they calling him and all had fuel oil for sale, "not little lots but jags of it." Others showed tele-

grams by the stack offering fuel oil. Many of those were sent before the announcement of the decline in Pennsylvania crude and the natural inquiry was if they had some premonition of the decline or if they simply found that at the end of July they had more fuel oil to move than any other product? In some cases the refiners stated that their crude was coming in so fast that they needed the tanks used for fuel oil to store their crude. These were refiners with considerable production. The prices offered range from 2½ to 5 cents below recent quotations. The result has been lower quotations to consumers and as usual some of the very lowest quotations have been direct to the consumer by the refiner. One large Middle West refining organization with plants also in the field, has broadcast a price of 82½ cents direct for its heavy fuel oil. There is the usual complaint on the part of dealers in fuel oil that just as soon as they get a customer and give the refiner shipping instructions to deliver to that customer, the refiner either sends a salesman to call or writes a nice letter suggesting that the buyer should place his orders directly with the refiner and presumably save the profit made by the dealer. This is nothing new but at times it seems to be a little more the custom than at others and recently this has been one of the times. In one case the refiner was injudicious enough to write a letter reflecting on the standing of the fuel oil dealer. The customer wrote the refiner a letter and sent a copy of the letter to the dealer. If the refiner enjoyed reading the letter he would enjoy a seat on a hot griddle. There are few that would knock a competitor. They know better.

Seasonal Industrial Demand

There is just the usual midsummer dullness in the industrial demand. The railroads are not hauling as much miscellaneous freight but they are running as many trains and using the average amount of oil. Many plants are closed down wholly or in part as is their custom at this season. Some are resuming operations after a shutdown, but generally the industrial demand is at the low midsummer average. No great improvement is expected until between September 1 and 15 and it may be delayed until October 1. In the meantime the buyers are ordering for immediate needs in small quantities and trying hard to get the price level down as low as they can before the time comes when they will have to begin buying on a larger scale. There is little new in the Smackover situation. Supplies are small for this market and the demand at the present prices is limited. The present situation in the coal strike suggests that a recent prediction made by some coal men and repeated in this column that the strike would be settled along about August 15 is not far out of the way. Both sides are at least willing to parley and outside influences are becoming active to secure an agreement. Stocks of coal here are said to be ample and judging by the supplies piled up along the railroad tracks they are all of that. Juding from the size of some of these stocks there will be no rush of buying when mining is resumed.

Refiners report that buyers are beginning to contract for their supplies of winter lubricating oils and that some have already contracted for all or part of their season's needs. The demand from the distributing trade is fairly well maintained. The industrial demand is light at present. Prices are unchanged. One of the leading refiners is stated to have made an early start with its special process winter oils and has signed up business for at least one-half its winter output of these oils.

Buy to Avoid Tax

The demand for gasoline continues large with concerns reporting various increases for the month of July, but a fair average over the territory seems to be around 10 to 15 per cent. Some districts and some concerns report that they have not done as well as they did for June, but this is undoubtedly due to the increase in the stations rather than the lack of actual consumption. Locally the only riffle made by the beginning of the gasoline tax collections in this State was the rush of last minute buyers to fill their tanks before the law went into operation. Some oil men estimate the sales last Sunday, the last day of tax-free gasoline at 3,000,000 gallons in Chicago alone. Some of the lack of demand during the past week and reports of dull business is doubtless due to the possession of these supplies by motorists. One large consumer is reported currently to have over a million gallons in store. There is a story regarding a certain oil man, until recently well known as a distributor, who bought, the story goes, a million gallons of gasoline cheap last spring, say at 6 cents or an eighth under, and stored it here while waiting for a profit. The market never got to his figure and it looked as if he might be obliged to dump when the circumstance that the gasoline was in storage in the State on August 1 made it tax exempt if owned by a consumer, and he found such a consumer in a large taxicab company and escaped with a nice little profit after all.

The tank wagon price situation is still unsettled here and there by price wars. The Twin Cities refuse to remain settled and the price has been reduced at stations to 14 cents including tax, which is also, so far as the Standard Oil is concerned, the tank wagon price. There seems little likelihood of any general change so long as the "ice cream season" continues, to quote a prominent oil man. The good months ahead will not, if the leaders have their way, be disturbed by price changes in the tank wagon or the refinery prices, or even the crude market. Regarding the last named, while not unduly hopeful, the industry here is going to wait and see what the arrangement to prorate in the Seminole will prove. It may be that some measure of relief capable of wider application has been worked out. At any rate, "Let's wait and see."

EASTERN REFINED MARKET WEAK; STATISTICAL POSITION STRONGER

By N. O. Fanning

New York Bureau, The Oil and Gas Journal, Room 629, No. 101 Park Avenue, New York, N. Y.

NEW YORK, Aug. 6. — Continued weakness prevailed in the refined oil markets on the Atlantic Coast during the past week. This was evidenced mostly by general cutting of the retail prices for gasoline but there was no announcement of a general tank wagon cut. In New York City most garages and service stations are now selling gasoline for 20 cents, notwithstanding the fact that the tank wagon price nominally is 19 cents. So far as could be learned, The Texas Company is the only one of the larger marketers which has reduced the tank wagon price recently, that concern now quoting 18 cents in the greater city, a reduction of 1 cent.

The Tide Water Oil Co. has put into effect a new price policy in New York City with regard to gasoline. The company does not sell on a tank wagon basis any more, but has a "curb price" which is 1 cent above the tank wagon market as a rule. At present, however, this "curb price" is 19 cents, or the same as the tank wagon price quoted by most of the big marketers in New York City. The purpose of the change in policy is to establish Tide Water Oil gasoline on a higher quality basis, according to interests close to the company.

In spite of the apparent weakness in retail gasoline the general statistical position of the market is said to be much stronger, and in some quarters it is said refiners hope that a widespread slashing of tank wagon prices below present levels will be averted. Refiners here are drawing heavily on stocks of gasoline and in some instances cracking operations are being resumed.

The selling of U. S. Motor gasoline at refineries in tank car lots for 8½ cents is still proving a depressing influence on the gasoline market, and is the opinion of many authorities that there will be no permanent improvement in the tank wagon situation until this practice ceases. It is expected that refiners will not feel that they can continue to sell all the U. S. motor gasoline wanted on this basis much longer, because all sold cuts in on the business of supplying regular customers branded gasoline.

Kerosene Unchanged

Sales of water white kerosene at refineries at 6½ cents a gallon in tank cars was reported during the week, although most factors are quoting 6¾ to 7 cents. Prime white is moving at 6⅜ cents a gallon, and standard white at 6 cents. As no special influence has exerted itself in either direction the market generally remains unchanged with both domestic and export demand limited.

Gas and Fuel Oil

Gas oil is steady at 5½ cents a gallon, f.o.b. refinery on the Atlantic Seaboard. Sales were rather heavy at this figure, as consumers seem anxious to stock up while quotations are low.

Diesel oil continued in good demand and is still quoted at $2 a barrel to the trade, with lighterage charge of 6½ cents a barrel extra.

Bunker fuel oil continues to be quoted at $1.65 a barrel. Heavy reciepts of California fuel oil during the past few weeks have failed to depress the price of this product, and it is hoped that if refiners can maintain prices for a time there will be no further cut. It is pointed out that cracking operations are increasing somewhat and a possible turn for the better in the general situation is indicated.

Lubricating Oils

The lubricating oil market is unchanged, with bright stock in good demand but cylinder oils, red and pale paraffins quiet and rather weak. Marketers are not anticipating any particular change in trend until fall, when seasonal influences should strengthen the market somewhat.

Paraffin Wax

Marked improvement is reported in the demand for paraffin wax, partly as the result of recent heavy export orders for both crude and refined. For the first time in many months producers of wax are beginning to register a certain degree of optimism. It is hoped the improvement will actually be lasting enough to have an effect on prices, which are now abnormally low.

Petrolatum

Dark green petrolatum is in good demand with sales reported at 2⅞ cents, but buyers in some cases holding out for 2¾. Other grades are fairly active, but unchanged in price.

The Export Market

After a short period of activity the bulk export market has quieted down. Not a single export bulk cargo went out last week. Several orders were booked, however, and deliveries will be made shortly.

Paraffin wax registers considerable improvement in the export division. Exports have been running in excess of 2,000,000 pounds a week, with crude wax accounting for about 75 per cent of the movement. A revival is noted, however, in refined wax also.

Petroleum Exports

The following table shows principal exports of petroleum and petroleum products from New York during the last three weeks (all figures in gallons unless otherwise noted):

	Aug. 3	July 27	July 20
Gasoline:			
Cases	1,223,460	.....	.....
Kerosene:			
Cases	842,980	1,729,690	1,534,830
Lubricating oil:			
Bulk	.....	3,286,167	.....
Barrels	1,014,750	615,750	1,399,650
Cases	76,990	114,860	457,510
Lubricating grease:			
Barrels (lbs.)	945,000	391,500	267,750
Paraffin wax:			
Bags (lbs.)	1,165,560	440,000	498,520
Barrels (lbs.)	1,044,525	2,017,800	1,602,175
Petroleum asphalt:			
Barrels (tons)	520	5,127	6,132

The foregoing figures includes all shipments of 500 bbls., 1,000 cases, or more.

Oil Tanker Market

The oil tanker charter market is dull. Rates are steady. New fixtures include the following:

Tanker W. H. Libby (Am.), gasoline and (or) kerosene, August loading, Gulf to north of Hatteras, 28 cents a barrel.

Tanker Galena (Am.), prompt loading, Gulf to north of Hatteras, 28 cents.

Tanker Tracy Bros. (Am.), Gulf to north of Hatteras, crude, prompt loading, 30 cents.

Tanker British Industry (Br.), clean oil, Gulf to French Atlantic, September-October loading, 26s 6d.

Tanker Aral, Constanza to Seville, 20s., Santander 25s., Las Palmas 26s. 6d., crude, or 29s. 6d. clean, August-September loading.

Tanker Marisedda, to Bona, Algiers and Cette, first trip 25s. 6d., and from Black Sea ports to same, second trip 27s. 6d., clean, August loading.

Tanker Eugene V. R. Thayer (Am.), last half August, fuel oil, Gulf to Buenos Ayres, $1.30 a barrel.

Tanker Mexico (Dan.), 4,400 tons gas oil, August loading, Gulf to Norway (rate not given).

Oil Receipts

Receipts of crude and refined oil at Atlantic Coast ports for the week ended August 3 are estimated at 4,453,000 bbls., a daily average of 636,000. This compares with 3,883,000 bbls., or 555,000 bbls. daily, for the week ended July 27.

There was a considerable increase in imports, the total for the week being 1,086,000 bbls., a daily average of 155,000. Mexico accounted for a daily average of 102,000 bbls., being the largest movement in many weeks from that country.

Petroleum Receipts

The following table shows estimated daily average receipts of crude and refined oil by water at Atlantic Coast ports for the past three weeks; also monthly record for the past 12 months (figures in barrels):

	Aug. 3	July 27	July 20
Gulf Coast	383,000	353,000	457,000
Pacific Coast	98,000	98,000	85,000
Mexico	102,000	62,000	78,000
South America	53,000	42,000	41,000
Total	636,000	555,000	661,000

Daily Averages by Months

1927:	Gulf	Pacific	Mexico	S. Am.	Total
July	406,000	83,000	78,000	45,000	616,000
June	378,000	118,000	68,000	47,000	611,000
May	332,000	58,000	91,000	53,000	534,000
April	388,000	93,000	69,000	61,000	611,000
March	345,000	103,000	36,000	81,000	565,000
Feb.	379,000	89,000	40,000	48,000	556,000
Jan.	362,000	73,000	49,000	61,000	545,000
1926:					
Dec.	363,000	57,000	49,000	61,000	530,000
Nov.	335,000	62,000	56,000	40,000	493,000
Oct.	270,000	71,000	61,000	43,000	445,000
Sept.	299,000	98,000	63,000	58,000	518,000
Aug.	320,000	61,000	71,000	46,000	498,000

The foregoing figures are based on the carrying capacity of incoming oil-laden tankers.

GULF COAST FIELDS

(Continued from Page 51)

Ridge Dome, Brazoria County, is resetting strainer at 4,293 feet for another test. A test three weeks ago showed oil, but the well would not flow. The Associated Oil Co.'s No. 1 Seaburn on the east side of the same dome is drilling around 3,796 feet.

Brain and others' No. 2 Fitch, north of Spring, Montgomery County, is drilling around 1,450 feet in the second hole. The first was abandoned as a bad fishing job at 2,300 feet. The same interests have a derrick standing south of Tomball. Beard and others' No. 1 fee, 15 miles east of Conroe, is at 1,240 feet.

AUSTIN-TEMPLE SURVEY HAS BEEN COMPLETED

AUSTIN, Tex., Aug. 6.—Survey of a possible route of a 14-inch pipe line between Temple and Austin was completed by engineers for the Lone Star Gas Co., which may supply several Central Texas towns if its bid, based on the Austin-Temple Survey, is successful.

A route has been marked from Temple through Holland, Bartlett, Granger and Pflugerville, practically the shortest route. Branch lines would be laid from Austin to Taylor and Georgetown. If the company does not get the Austin contract lines would be laid from Granger to the other two towns.

Offer Degree Course in Refining

University of Pittsburgh Establishes Separate Department and Confers Degree in Petroleum Refining. Courses Explained

By Warren F. Faragher* and Raymond L. Abel†

Refiners have generally recruited their technically-trained men for the operating departments from the graduates of the standard courses of mechanical, civil and electrical engineering. During the past few years, graduates of courses of chemical engineering and of chemistry have been considered suitably trained for positions in the refinery. The route has not always been direct to the refinery. Practical experience in constructing and operating mechanical equipment and in co-operating with men and directing the activities of men have frequently been acquired first in other industries.

Neither the training at school nor the experience of former positions in other industries has made finished refinery operators. All these technically-trained men have had to learn the details of refinery operations just as have the employes without formal technical training. It has been necessary to acquire information about the actual processes as they are conducted by their companies. There has been competition from the beginning between the two groups, and both classes have furnished men who have progressed satisfactorily to a mastery of the problems of refining.

The necessity of operating refineries upon a basis of rigid economy, and the diversification of the problems entailed in the every-day operation have enhanced the value of the training of the technical man. Officers of refineries and educators understand that the completion of a sound course of engineering does not insure success in the operating branches of refining. Both groups agree in believing that the benefits of such training are a positive aid to the man who through natural ability and aptitude for mechanical work would have been a successful operator without the training. In the majority of cases, too, the training should be an asset when a man has progressed to the executive positions.

Not Vocational Courses

It cannot be denied that our good engineering courses are so far removed from vocational courses that graduates are primarily inexperienced engineers rather than operators. The results obtained by these men in practice justify the standards of the courses as now constituted. There seems to be little justification for a strictly vocational course in petroleum refining. Indeed, if there were such a need, it seems inadvisable that there should be attempts to fill it by the establishment of vocational courses in our colleges and universities. Intensive courses for engineering graduates conducted by an educational division of the refinery organization seem to be the practical solution of this problem.

During the past 10 years, there has been a growing appreciation by executives of refineries of the value to them of contributions by scientists and engineers. A preference for technically-trained men has resulted. Little modification of engineering courses has yet been made; the same type of graduate is offered by the schools to the refiner.

An exception to this statement is the establishing of courses in several schools to train geologists and petroleum engineers for the departments of production of petroleum companies and for producers. More recently, three or four universities have presented one or several courses dealing with refinery technology. Only the University of Pittsburgh, however, has established a separate department that offers a full course of refinery engineering and that grants its degree.

The first of the departments of petroleum geology and production engineering was developed in the School of Mines, University of Pittsburgh. For over 10 years Prof. Roswell H. Johnson, Prof. Ransom E. Somers, and their associates, have conducted this department with marked success. Graduates of the course have been successful in all the oil fields of the world.

In 1919, Professor Johnson persuaded the senior author, who was in charge of petroleum research at Mellon Institute, University of Pittsburgh, to present to his men a general descriptive course on the chemistry of petroleum and the technology of the refining of petroleum. It was hoped that the men would have their interest stimulated so that they would go on to acquire a general knowledge of the problems of the refining branch of the industry. This course was given by the senior author, and later by him and his associates at Mellon Institute, W. A. Gruse and R. W. Henry. During the past two years it has been conducted by the junior author.

Refining Course

The success of the course in geology and production, and the demand for a parallel course in petroleum refinery engineering, prompted the senior author to attempt to develop a refining course. With the aid of Dean Frederick L. Bishop, Professors Johnson and Somers, William A. Hamor, Assistant Director of Mellon Institute, and several members of the factulty of the School of Mines and the School of Engineering of the University of Pittsburgh, a curriculum was prepared and offered in the school year 1922-1923. All were agreed that the course should furnish, primarily, training in the sciences and the basic subjects of engineering. Rather more chemistry and physics were included than are found in the usual courses of mechanical engineering, and more engineering subjects than are offered in the courses of chemical engineering. With the co-operation of the instructors who present the courses selected, it was insured that many of the principles to be studied would be illustrated by the processes of a petroleum refinery. The principles would be grasped as readily as usual, it was believed and the student would have information that he deemed necessary. He would have in this way and as the result of the few specialized courses of the refining department a familiarity with the problems with which he would have to cope, if he accepted employment in a refinery. On the other hand, if he chose work in another industry involving chemical or mechanical engineering, he would still be able to compete without a too great handicap, with graduates in chemical or mechanical engineering.

The curriculum has undergone changes steadily, but the point of view adopted in the beginning has been kept.

Gradual Growth

The experimental period called for a modest procedure; the worth of the scheme had to be proved, and the demand for the course established. Funds were limited, naturally. No effort was made to obtain a large number of students. The courses of the department were offered during the first two years (1922-1923 and 1923-1924) by the senior author and his associates on the Petroleum Fellowship at Mellon Institue. Since the fall of 1924, a regular members of the faculty of the School of Mines has been in charge of the course-work of the Department. The man chosen was Raymond L. Abel (B. S. in Chem. Eng., and M. S., Carnegie Institute of Technology). Mr. Abel had been tested as a refinery man by more than two years of employment at the Pittsburgh and the Philadelphia refineries of the Atlantic Refining Company. At the Pittsburgh refinery was Assistant Superintendent of Processes and Power for two years.

During the past three years the senior author has assisted as Head of the Department in the general development of the course. Since his removal from Pittsburgh in 1926, he has retained his position because of his interest in the work, through the courtesy of his employers, the Universal Oil Products Co. Occasional trips to the University have given direct contact with the problems of the Department.

The curriculum for the current year is shown in the accompanying table.

Description of Courses

All students in the School of Mines and Engineering take the courses listed for the first year. During the second year, one or two courses differ for the students in the various departments of the School.

In the third year the basic courses of chemistry, civil engineering, and mechanical engineering are given. A departmental course, "Refining Practice", familiarizes the student with the processes and equipment of the refinery and with the methods of control by the laboratory. The experimental methods of studying crude oils and their products that are employed in the industry are included.

The courses in physical and organic chemistry are those given to students who major in the Department of Chemistry.

The work done in mechanics of materials is complete. It includes a study of the strength, elasticity, and resilience of materials of construction; simple and combined stresses in beams, columns, and shafts; and laboratory exercises that demonstrate the physical properties and the suitability of materials of construction used in refineries.

Hydraulics covers the equilibrium and pressure of fluids; the flow of fluids through orifices, over weirs, and in pipes and canals; the measurement of water-power; and hydraulic machinery.

The courses in mechanical engineering are the regular courses that are required of students who select the option of steam-power plants in the Department of Mechanical Engineering. The course of

Petroleum Engineering at Universities

More and more attention is being given by universities to courses of special interest to students who expect to engage in some branch of the oil industry after graduation. Several technical schools and universities are offering new courses for the school year which starts in September or October.

For the students who will enter the manufacturing or research divisions, several universities are offering engineering courses which furnish the ground work which is usually followed by practical training after graduation. This is in response to a demand for more technically-trained men by the industry.

The University of Pittsburgh is the only school at the present time which has established a separate department that offers a full course in refinery engineering and that grants its degree. The degree granted is that of Bachelor of Science in Petroleum Refining.

The establishment of a special department for students who will enter the petroleum refining industry after completing their university training, has been a gradual development at the University of Pittsburgh. Its success is indicated by the fact that the demand for its graduates has exceeded the supply. In this article the authors who have been connected with the university for several years explain the purpose of the training offered with a description of the courses.

OUTLINE OF COURSES IN THE DEPARTMENT OF PETROLEUM REFINING

Freshman Year

Course	Subject	1st Semester Hours Recitation	1st Semester Hours Laboratory	2nd Semester Hours Recitation	2nd Semester Hours Laboratory
English	English Composition	4	0	4	0
Mathematics	Algebra, trigonometry, and analytical geometry	4	0	4	0
Chemistry	General inorganic chemistry	3	4	3	4
Civil Engineering	Mechanical Drawing	0	3	0	3
Economics	Principles of Economics	3	0	3	0
Psychology	Introduction to Psychology	3	0		
	Physical Education or Reserve Officers Training Corp	0	3	0	3
		14	10	14	10

Sophomore Year

Mathematics	Differential and Integral Calculus	4	0	4	0
Physics	General Physics	3	6	3	6
Chemistry	Qualitative and Quantitative Analysis	2	6	2	6
Geology	General and Historical Geology	3	3	3	3
Physics	Applied Mechanics			4	0
Civil Engineering	Plane Surveying	1	3		
		13	18	16	15

Junior Year

Civil Engineering	Mechanics of materials	3	2		
Civil Engineering	Hydraulics			4	3
Mechanical Engr.	Heat Power Engineering	2	3	2	3
Chemistry	Physical Chemistry	2	3	2	3
Chemistry	Organic Chemistry	3	5	3	5
Refining	Refining Practice	2	3	2	3
		12	16	13	17

Senior Year

Chemistry	Colloid Chemistry			2	0
Business Adm.	Business Principles	3	0		
Business Adm.	Business Law			2	0
Mechanical Engr.	Steam Power Plant Engineering	2	3	2	3
Electrical Engineering	Applied Electricity	2	3	2	3
Oil and Gas Production	Oil Geology	4	0		
Oil and Gas Production	Technology of Production			2	0
Refining	Chemistry and Principles of Refining	2	6	2	3
Refining	Seminar	1	0	1	0
Refining	Refinery Design and Construction			1	6
		14	12	14	15

*In charge of development and research for the Universal Oil Products Co., Chicago. Professor and head of the Department of Petroleum Refining Technology, School of Mines, University of Pittsburgh (not in residence since June, 1926.) †Assistant Professor of Petroleum Refining Technology, School of Mines, University of Pittsburgh.

the third year includes combustion, elementary thermodynamics, the construction, operation, and testing of boilers, steam-engines, gas-engines, turbines, and power-house auxiliaries. In the fourth year, advanced thermodynamics, fundamentals of engine and turbine design, and the economics of the operation of power-plants are studied.

Allied Subjects

The two courses chosen from the curriculum of the Department of Oil and Gas Production are designed to give the student an understanding of an important allied field. He is introduced to the problems of the industry and is enabled to continue an independent study of them in later years. Oil geology presents the theories of the origin, accumulation, and occurrence of oil, gas, and oil shales. The methods of selecting favorable sites for drilling are studied. The technology of oil and gas production includes the considerations that control the spacing of wells, drilling, pumping, and the transporting and storing of oil. Methods for increasing the percentage of extraction are considered. The production and distribution of gas are studied also.

Because of the obvious value of colloid chemistry to the petroleum technologist, a graduate course of the Department of Chemistry is included in the Senior curriculum.

The course in Business Law and Principles was organized by the staff of the School of Business Administration in collaboration with the School of Mines to meet the particular needs of its students. Electrical Engineering covers the principles of direct and alternating current machinery and the selection, erection, and operation of electrical equipment in modern industrial plants.

Senior Course

The senior course, the "Chemistry and Principles of Refining", is designed to give the student majoring in petroleum refining a mastery of the chemistry of petroleum and the principles of chemistry and of engineering underlying the design and operation of refining equipment. In a general way the course resembles modern courses on the principles of chemical engineering.

The chemistry of compounds present in petroleum, their thermal decomposition, and the action of refining agents upon them precede a study of the chemistry of the particular refining processes such as chemical treatment and cracking.

"Principles of Refining" deals with (1) the fundamental equations of fluid flow and the use of them in the transportation of liquids and gases and the measurement of flowing fluids; (2) the theory of heat-flow by conduction, convection, and radiation and the application of it to the design of stills, furnaces, heat exchanges, and condensers; (3) the process of combustion both from the chemical and mechanical viewpoint; (4) the theory of distillation in which empirical data on standard equipment are checked against theoretical calculations; (5) the theory of refrigeration by compression and absorption, with problems in the design and operation of the refrigeration-equipment of the refinery.

The seminar is intended to train the student in the organization and presentation in oral and written reports of material found in the current literature of his field. It involves reports on processes of historical interest, recent research, and plant developments affecting the industry.

The course, "Refinery Design", is a drawing-board course in which application of the principles of refinery engineering is made to the selection of site, general arrangement of the plant, and the design of refinery equipment.

During the second semester of the fourth year, one trip of inspection per week is made to the refineries and other industries of the Pittsburgh district.

Laboratory Equipment

For crude and rerun distillation the laboratory is equipped with a horizontal still of 1 bbl. charging capacity, a 12-gallon vertical still, and two 2½-gallon vertical stills. Additional distillation equipment includes a 10-gallon horizontal still for the reduction of asphalt, the coking of oil, and the destructive distillation of shales; a 30-gallon Lummus plate-column still for fractionation of light distillates; a 15-gallon vacuum still for lubricating oils: a 25-gallon dehydration still and a 4-gallon pressure still designed for a maximum operating pressure of 500 pounds per square inch.

A refrigeration unit, filter presses, Sharples supercentrifuge, percolation filters, clay-grinding and clay-burning equipment for experimental studies of refinery production of paraffin wax, petrolatum, and lubricating oils are provided.

The laboratory contains, also, the equipment for testing petroleum and its products that is prescribed by the American Society for Testing Materials. Complete equipment for technical-organic, fuel, and gas analysis is available.

Co-operative Work

"The University of Pittsburgh has required co-operative work of all students in engineering since 1910. The demand for its students has exceeded the supply, and the benefits of the supervised work in factories are now unquestioned.

"Co-operative work is supervised, training in industry during undergraduate courses of study. The practical training for the student is of a fundamental nature, conducted under actual commercial conditions. The student works for a definite number of hours a day and is paid for his services by the company employing him. While the work and the pay received for it are important, the most direct benefit to the student comes from the opportunity to observe the various phases of engineering work, such as factory organization, plant operation and labor conditions, and thus properly to co-ordinate theory and practice. The student receives the same amount of theoretical training as he would in the ordinary engineering or technical school.

"Each student is interviewed during the second semester of his freshman year by a representative from the office of the Dean of the School of Engineering and the School of Mines. Detailed information is secured on his preparatory training, previous industrial experience and aptitude for various lines of work, in order that his assignment to industry may be of most benefit to him. The University is obligated to some corporations to keep certain co-operative positions continuously filled. This sometimes necessitates assigning a student to work where he must live at a distance from his home or from the residence he has established in Pittsburgh. However, due consideration is given to the student's place of residence so as to cause as little inconvenience as possible in the matter of transportation to and from work.

"Assignments are made to co-operative work: (1) during the summer term following the freshman year; (2) during one semester of the sophomore year; and (3) during one semester of the junior year. As each class is divided into two sections immediately at the close of the first period of co-operative work, the classroom work of the first half of both sophomore and junior years is repeated during the second half of each academic year. The second half of the sophomore and of the junior years, respectively, is given only in the summers.* Co-operative work in the Department of Petroleum Refining was begun in 1926.

Students of the department spend their periods of co-operative work in a large modern refinery. The work is supervised by the co-operative department of the School of Mines and Engineering. All the fundamental processes of refining are in use at the co-operating refinery. The graduate of the department will thus have, in addition to his course-work, one year of refinery experience that no school laboratory can hope to duplicate.

Department Graduates

The degree conferred by the department is Bachelor of Science in Petroleum Refining. Upon giving satisfactory evidence of having successfully practiced his profession for three years, writing a satisfactory thesis showing the application of engineering principles to some important project, and passing an oral examination, graduate of the department receives the degree of petroleum engineer.

Since the establishment of the department, 19 men have been graduated. All these men are now employed in the industry. One graduate is in Mexico, one in France and one is employed by the Argentine Government. In this country, five are with the Standard Oil Co. of New Jersey, six with the Gulf Refining Co., one with the Standard Oil Co. of New York and two with the Universal Oil products Co.

*Bulletin of School of Engineering and Mines, 1926-7.

WEST TEXAS BANNER PIPE LINE YEAR

(Continued from Page 34)

and will tap the Southern Pacific Railroad for coastal shipments in tank cars. The Transcontinental is joint producer with the Mid-Kansas Oil & Gas Co. in Pecos and the companies hold extensive properties in the pool which they discovered last year.

It is estimated the line will have a capacity of 32,000 bbls. daily and will be about 70 miles long. One field station will be built and another booster station about the center of the line will be built. Centrifugal pumps will be installed in the pump stations and the pumps will be powered by motors. The freight rate on crude from Pumpville to the coast is said to be around 10 cents per hundred pounds.

Southern Pipe Line Co. has considered building a 10-inch line from the Crane Upton area to Corpus Christi, but no definite announcement has been made by the company. The Southern company is building an 8-inch line 18 miles in length, paralleling that company's 6-inch line from the Hendricks Field in Winkler County to Wickett. The Southern company's line to the loading rack at Wickett on the T. & P. Railroad is the only outlet at present for Winkler County crude. Gulf Pipe Line Co. is also considering running a line into the Hendricks Field.

Increasing Storage

In addition to the storage mentioned considerably more storage is being erected in the various West Texas pools.

Magnolia Petroleum Co. has three 55,000-bbl. tanks up in the Church and Fields Pool and four more are being shipped into that area. Two of the tanks are being moved from the Bull Bayou Field in Louisiana and the other two are practically new tanks. In the same area the Atlantic Oil Producing Co. and Simms Oil Co. have four 55,000-bbl. tanks up and are building four more. The same companies plan to build four additional.

Eastland Oil Co. and Collett have two 55,000-bbl. tanks and one 64,000-bbl. tank up and are building five more 55,000-bbl. tanks on their Church and Fields Pool leases. Those operators are negotiating with the Gulf Production Co. for surface rights to build four or five additional 55,000-bbl. tanks. Church and Fields are adding two more 55,000-bbl. tanks to the one they now have in the pool.

Illinois Pipe Line Co. is building a 55,000-bbl. tank on its tank farm at Hurdle, near McCamey. Humble Pipe Line Co. is building six 55,000-bbl. tanks at Kemper station in Reagan County. In North Texas the Humble company bought a 50-acre tract near Myra, in Cooke County, for a tank farm. The farm is 3 miles east of the Muenster Pool. Levels have been run for two 55,000-bbl. tanks and it is possible to put 10 tanks of that capacity on the farm.

Landreth Production Corp., Breckenridge, Tex., has purchased three 55,000-bbl. tanks which are to be erected on the Landreth "strip," which divides the Church and Fields properties and Gulf Production Co.'s McElroy property.

FARMINGTON, N. MEX.

(Continued from Page 39)

of Mancos, was down 100 feet Wednesday evening and drilling in shale.

The Huntington Park Oil Syndicate, operating in the Blanco district, Section 29-30-9, is underreaming to lower casing before starting to deepen the hole, which was bottomed in the Farmington sand.

Blanco District.

The Union Oil & Mining Co., operating in the Blanco district, Section 8-29-9, has resumed fishing but had not been successful in recovering the last string of tools at the last report.

The Federal Drilling Syndicate, which put down a hole to the depth of 500 feet in the Gobenador district last fall and then suspended operations, is reported to have been reorganized and will resume operations under another name at an early date. It has 12-inch casing set at a depth of 500 feet in Section 8-29-7.

The report from the Hospah district is that the Midwest Refining Co. in Hospah well No. 1, Section 1-17-9, had penetrated all the Dakota sands and got only water. While this is disappointing, it is still believed the field will be a profitable producer from the Mesa Verde sands that are reached at a depth between 1,500 and 1,600 feet.

While the Midwest failed to get production in its No. 1 the San Juan Coal & Oil Co., drilling in Section 17-18-10, reports a 10 to 15-bbl. producer in the shallow sands at a depth under 400 feet.

The Inland Oil Co., drilling in Section 22-18-10, is reported to have struck the producing sand at a depth of 480 feet but the extent of the production was not given out.

Hospah District

The Producers & Refiners, operating in the Hospah district, SW, SE, Section 25-18-9, is drilling below 1500 feet after setting 12-inch casing at about 1,350 feet. The company expects to have to go deeper for the Mesa Verde sands than did the Midwest in No. 1 but should reach it in another week with good luck in drilling.

The Williams-Staplin well in the Hospah district, Section 30-18-9, has succeeded in shutting out the water at 1,840 feet, it is reported, and will go farther into the sand.

The Dysart well in the Seven Lakes district is underreaming at a depth of 1,170 feet on Section 21-14-9, the showing of oil encountered at a shallower depth not being sufficient to warrant stopping there.

The Reliance Oil Co., operating in the Seven Lakes district, Section 15-17-9, is shut down, awaiting material.

The Reliance Oil Co., operating in Section 15-16-10, is awaiting the arrival of casing at a depth of 750 feet.

The Continental Oil Co., whose location in Section 9-17-7 in the Hospah district, spudded in on July 26, at the last report was drilling at a depth of 63 feet. Its operations at Boundary Butte are not active, merely keeping machines and pipe lines in condition for future drilling.

The Midwest Refining Co.'s No. 4 Hurst, Section 1-17-9, had reached a depth of 1,600 feet. No official statement was made here as to the production encountered in the Mesa Verde sand last week, but it is believed to have been of commercial importance.

The Ohio Oil Co., operating in the Hospah district, Section 18-16-9, has been making 100 feet per day and was below 800 feet at last report. It is also arranging to put a rig at work on the Stony Butte structure about 40 miles south of Farmington.

The Portage Oil Co., operating on the Glade structure, Section 25-31-13, has completed running the string of 8-inch casing to a depth of 660 feet and expects to resume drilling at once.

The Miley Oil Co. well in the Red Mesa district, Section 32-33-12, is reported to have entered the Dakota sands without any commercial showings of oil. The formation seemed to have been broken at that point. No announcement has been made as to future operations.

EUGENE NEILL DIES

PITTSBURGH, Pa., Aug. 6.—W. E. Neill, gauger for the Eureka Pipe Line Co., died last week at Parkersburg, W. Va. Mr. Neill was one of the oldest pipe line workers. He was born at Pithole, Venango County, Pennsylvania, February 28, 1868. He started with the National Transit Co. in July, 1884, and was transferred to the Southwest Pennsylvania Pipe Line in 1888 and later was transferred to the Eureka Pipe Line Co., where he had been in active service in various districts. At the time of his death he was stationed at Cairo, Ritchie County, West Virginia.

REFINING AND MARKETING

Universal Files Additional Suits Involving Patents

Alleging that the defendant corporation was infringing on five of its patents in the operation of a cracking process at its West Tulsa refinery, the Universal Oil Products Co., owners of the Dubbs cracking process, has brought suit against the Mid-Continent Petroleum Corp. of Tulsa in the United States District Court at Delaware. In the same court the Universal company also has filed infringement suits against the Lincoln Oil Refining Co., White Eagle Oil & Refining Co. and the Crown Central Petroleum Corp., based on the operation of the Holmes-Manley process.

In the suit against the Mid-Continent corporation the cracking process involved is one developed at the corporation's refinery. Patents in connection with the process were taken out in the name of Fred B. Kountz, general superintendent of the refinery. The process which is of the tube and tank type, has been in operation for over a year. The new process is taking the place of the Cosden-Coast cracking equipment of the old shell type, which was in operation at the refinery for several years.

The issues involved in the suits against the Lincoln, White Eagle and Crown Central companies are not new, as the Universal already has a suit pending against The Texas Company, based on the operation of the Holmes-Manley cracking process, which The Texas Company owns. The companies named in the latest suits are licensees of the Holmes-Manley process. The Lincoln company has units in operation at its Robinson, Ill., refinery, the Crown Central at its Houston plant and the White Eagle at its Fort Worth and Casper plants. The Lincoln and Crown Central units have been placed in operation during the past year.

Mid-Continent Suit

The bill against the Mid-Continent corporation alleges that the following patents, now owned by the plaintiff, have been infringed: No. 1,281,884, the invention of Milton J. Trumbull for process and apparatus for converting petroleum oils, issued October 15, 1918; No. 1,392,629, for process of converting hydrocarbons, issued October 4, 1921, on patent of Carbon P. Dubbs; No. 1,488,325, process for treating petroleum, granted to plaintiff March 25, 1924, invention of Carbon P. Dubbs; No. 1,525,284, a method of treating petroleum, granted to plaintiff February 3, 1925, invention of Carbon P. Dubbs; No. 1,546,634, granted to plaintiff July 21, 1925, apparatus for treating petroleum, invention of Carbon P. Dubbs.

On the first listed, patent claims 1, 2, 3 and 4 are alleged to have been infringed; of the second listed, claims 1 to 9, inclusive; of the third listed, all claims, 1 to 9, inclusive; of the third listed, all claims; of the fourth listed, claims, 1 to 12, inclusive; and of the fifth and last, all claims.

Other Suits

The Lincoln Oil Refining Co., Crown Central Petroleum Corp., and the White Eagle Oil & Refining Co. are alleged to infringe following patents: No. 1,123,502, claims 8, 9 and 11, issued January 5, 1915, to Jesse A. Dubbs; No. 1,392,629, claims 1 to 9, inclusive, a process of converting hydrocarbons, issued October 4, 1921, to Carbon P. Dubbs; No. 1,440,772, apparatus for treating petroleum and other hydrocarbons, issued January 2, 1923, invention of Carbon P. Dubbs; No. 1,484,445, all claims, issued February 19, 1924, on invention of Carbon P. Dubbs; No. 1,488,325, claims 1 to 8, inclusive, issued March 25, 1924, to Carbon P. Dubbs on a process for treat-

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DAILY GASOLINE TAX IN AUGUST WILL BE NEAR MILLION DOLLARS

Owners of motor vehicles in the United States through gasoline taxes are paying close to $1,000,000 a day for the privilege of operating their cars. Part of this burden is carried by the oil industry which collects the tax. However, so far as possible all gasoline taxes are added to the consumers' price so that it is the owner of the automobile, truck, bus, motorcycle and other motor vehicle on whom the burden of the tax finally rests. It is estimated that this tax will average $928,461 daily during the month of August.

Increases in gasoline taxes which recently have become effective in several states together with new taxes in Illinois and New Jersey have added greatly to the total gasoline tax. The present large tax also is partially due to the fact that the country is now in the midst of the greatest gasoline-consuming season of the year.

Forty-six states now have a tax of from 2 to 5 cents a gallon on gasoline sold within the state boundaries. Some states exempt gasoline used by tractors in farming but these exemptions are of no significance when compared to total the tax collected.

The latest state in which a gasoline tax became effective was Illinois. That State started to collect a 2-cent tax on August 1. The new tax of 2 cents in New Jersey became effective July 1. Both of these States are large consumers of gasoline. As shown in the accompanying table the tax during August will cost the owners of motor vehicles $40,488 daily in Illinois, and in New Jersey $22,656 daily.

In addition to these new taxes, increases in the tax rate have become effective in several states during the past few weeks. Included in these increases are Florida from 4 to 5 cents; South Dakota, 3 to 4 cents; West Virginia, 3½ to 4 cents; Iowa, 2 to 3 cents; California, 2 to 3 cents, and Pennsylvania, 2 to 3 cents. Due to the increase in tax, California now pays more tax than any other state. Its tax during August will average in excess of $90,000 daily. Ohio —which also increased its tax from 2 to 3 cents on May 25—is the second largest gasoline tax payer with a total of $77,335 daily, and Pennsylvania third with a daily tax of $69,878.

These three states in the order named follow New York as the four leading gasoline-consuming states. New York, whose August gasoline requirements will average 3,295,740 gallons daily does not have a gasoline tax at the present time. The other state without a tax is Massachusetts which also is a large consumer of gasoline.

The accompanying table shows that the gasoline taxes in all of the 46 states are 2 cents or more a gallon. This is a contrast to the situation five years ago when most states did not have a tax with the highest tax rate not exceeding 2 cents. It is estimated that the total gasoline tax collections for 1927 in the United States will be between $250,000,000 and $275,000,000. This tax on the motorist is in addition to the registration fees which totaled $271,171,724 for the first six months of 1927, according to government reports.

The daily gasoline consumption for August was derived from state reports which showed the actual consumption the first five months of this year. The rate of increase the first five months of this year over the same period last year was the basis of estimating the increase for August of this year over August, 1926. In the case of states which have a gasoline tax for the first time, the August gasoline consumption was derived on a basis of comparative automobile registrations.

Table Showing Estimated Daily Gasoline Consumption and Tax Collected for August

State—	Daily gasoline consumption	Tax cents per gal.	Total daily tax
Alabama	444,806	4	$ 17,792
Arizona	90,763	3	2,722
Arkansas	292,346	5	14,617
California	3,041,686	3	91,250
Colorado	483,731	3	14,511
Connecticut	497,000	2	9,940
Delaware	75,247	3	2,257
Dist. of Columbia	167,506	2	3,350
Florida	626,560	5	31,328
Georgia	582,761	3.5	20,396
Idaho	155,247	4	6,209
Illinois	2,024,421	2	40,488
Indiana	1,033,625	3	31,008
Iowa	889,554	3	26,686
Kansas	898,612	2	17,972
Kentucky	349,610	5	17,480
Louisiana	523,590	2	10,471
Maine	381,019	3	11,430
Maryland	405,864	4	16,234
Massachusetts	1,269,322	0	.....
Michigan	2,140,000	2	42,800
Minnesota	956,099	2	19,121
Mississippi	356,064	4	14,242
Missouri	975,939	2	19,518
Montana	238,451	3	7,153
Nebraska	547,474	2	10,949
Nevada	44,566	4	1,782
New Hampshire	205,487	2	4,109
New Jersey	1,132,810	2	22,656
New Mexico	103,347	5	5,167
New York	3,295,740	0	.....
North Carolina	558,719	4	22,348
North Dakota	282,861	2	5,657
Ohio	2,577,855	3	77,335
Oklahoma	860,051	3	25,801
Oregon	441,416	3	13,242
Pennsylvania	2,329,292	3	69,878
Rhode Island	235,052	2	4,701
South Carolina	248,559	5	14,227
South Dakota	274,129	4	10,965
Tennessee	474,097	3	14,222
Texas	1,928,272	3	57,848
Utah	133,959	3.5	4,688
Vermont	151,577	2	3,031
Virginia	466,801	4.5	21,006
Washington	618,847	2	12,376
West Virginia	340,680	4	13,627
Wisconsin	1,050,895	2	21,017
Wyoming	95,161	3	2,854
Total	37,333,469		$928,461

NATURAL GASOLINE IN POLAND

Polish production of gasoline from natural gas during the first four months of 1927 amounted to 8,746 metric tons, of which 2,375 tons, the largest amount for a single month, was produced in April. The four months' production was from 76,200,000 cubic meters of gas. At present there are 18 establishments in Poland producing gasoline from natural gas, a rapid increase in the importance of the industry being shown by the growth of annual production from 661 tons in 1921 to 10,044 tons in 1926, the production for the first four months of 1927 being only about 13 per cent less than that for the entire year of 1926.

SPENCER PETROLEUM OUTING

CHICAGO, Aug. 6.—The Spencer Petroleum Co. held its annual outing yesterday with a number of local oil men as guests. The Medinah Country Club at which the frolic was held was at its best, the chief object apparently of all present being the golf course.

MAINE OIL DEALERS

Independent jobbing interests have organized the Maine Independent Oil Dealers' Association. The organization meeting was held at Gardiner, Me., last week. Twenty-five jobbers attended the meeting.

OPENS CHICAGO OFFICE

CHICAGO, Aug. 6.—C. M. Ricketts has opened an office to do a general marketing business at Room 1,420, 624 South Michigan Avenue. Mr. Ricketts comes to this city from Wichita Falls, Tex., where he was buyer for the Spencer Petroleum Corp., of this city.

Tank Wagon August 1 Up Slightly; Average Tax 3 Cents Gallon

July passed with relatively few gasoline tank wagon price changes and the August 1 average price as shown by The Oil and Gas Journal's 50 cities is but slightly different than on July 1. Tax changes were of greater importance than the price changes. The average tank wagon price on August 1 was 14.89 cents, while on July 1 it was 14.86 cents. The average tax on August 1 was 3.0 cents, an increase of .12 cent over the tax on the first of the previous month. Over the past two months the tank wagon prices have remained fairly constant, with a tendency to increase slightly as the result of adjusting the prices in localities where competition had run them below normal.

Compared to a year ago, this year's price on August 1 was 4.81 cents lower. This differential has been maintained throughout the greater part of the year, and has cost the industry many millions of dollars. But with the present trend upward in tank wagon prices, the differ-

(Continued on Page 137)

AVERAGE TANK WAGON PRICE IN 50 CITIES

(Exclusive of tax)

January 1, 1926	16.133
February 1	16.213
March 1	17.267
April 1	18.517
May 1	18.487
June 1	19.607
July 1	16.697
August 1	19.697
September 1	19.587
October 1	19.167
November 1	18.187
December 1	17.607
January 1, 1927	17.567
February 1	17.469
March 1	17.007
April 1	16.160
May 1	15.320
June 1	14.720
July 1	14.86
August 1	14.89

COMMISSARY AT CASPER RETIRES FROM BUSINESS

CASPER, Wyo., Aug. 6.—The Midwest Comissary, supplying groceries, dry goods and other necessities to the Midwest Refining Co. and the Standard Oil Co. of Indiana employes, closes its doors in Casper today and will cease to do business from now on as a mercantile firm.

Shortly after the Standard Oil Co. of Indiana took over the Midwest Refining Co.'s plant at Casper and the Midwest Refining Co. became a field operating firm only, the cost of foodstuffs in Casper brought about an acute situation. The employes were unable to purchase their needs on account of the high prices charged by the local stores and to remedy this situation, the Midwest Refining Co. and the Standard of Indiana started the Midwest Comissary store in Casper and also at Midwest, in the Salt Creek Field.

The local merchants protested for several years against the comissary in underselling the rest of the stores and this summer the Midwest Refining Co. and the Standard Oil Co. of Indiana decided to abandon the Casper store although the one at Midwest in the Salt Creek Field will continue to function as usual and the stock remaining in the Casper store is to be transferred to Salt Creek Field to that store.

Brief Items for Plant Operators

NEW REFINERY UNIT AT OKLAHOMA UNIVERSITY

Through the generosity of firms manufacturing refinery equipment the School of Petroleum Engineering of the University of Oklahoma is to have a refinery of sufficient capacity to give results directly comparable with commercial large-scale operation. The plant will have a capacity of 100 to 300 bbls. of crude oil per day and will be of the most modern design.

The distilling equipment will consist of a pipe still wherein the oil is heated continuously, and a fractionating column 90 feet in height wherein the primary products, such as gasoline, kerosene, gas oil, and lubricating oils are separated. The plant will be located on the University campus southeast of the old engineering building and crude oil will be transported to the plant from the railroad siding by means of a pipe line previously used for transporting fuel oil. It is expected to have the plant in operation by the late fall.

The object of the installation is to provide instructions for students of petroleum engineering in plant operation and to collect information concerning heat exchange, fractionation, evaporation, chemical refining processes, etc. One feature of the plant will be a complete set of instruments for recording temperatures, flows, pressures, etc. No products will be merchandised in any way which might compete with commercial refineries, the sole object, as mentioned above, being to instruct students and to collect engineering information for the refining industry. It is anticipated that the plant will be operated on an average of twice a month on 12-hour runs and special attention will be given the matter of collecting abundant data and of working up the date of the runs by means of graphs and curves.

The equipment has been received through the efforts of F. W. Padgett, Professor of Refinery Engineering; H. C. George, Director of the School of Petroleum Engineering, and friends of the school in the refining industry.

UTAH CO. TO OPERATE THERMOPOLIS PLANT

CASPER, Wyo., Aug 6.—Preparations are being made by the Utah Oil Refining Co. to operate the refinery at Thermopolis, Wyo., according to reports here. The plant, which was formerly owned by the Alliance Oil and Refining Co., has been shut down for some time. The refinery property was purchased by the Utah company several months ago at a receiver's sale.

It is expected the plant will operate with crude from the Warm Springs Field which is connected by pipe line to the plant. The Utah company also owns several shut-in wells on the Black Mountain structure about 25 miles east of Thermopolis. It is expected that these wells later will be connected to the plant. The plant has a rated skimming capacity of 1,500 bbls. daily.

BEAVER ELECTRA PLANT IS BEING DISMANTLED

The skimming plant located at Electra, Tex., which was first operated under the name of the Beaver Electra Refining Co., is now being dismantled. The plant was built eight years ago during the Burkburnett and Electra boom periods by local capital.

After being operated for a time it was shut down. Later it was leased by the Constantin interests and operated under the name of the Petroleum Corporation. The lease expired and the plant has not been operated for over a year.

COURT HOLDS STABILIZER PATENTS INVALID IN IMPORTANT DECISION

A decision, which by many engaged in the manufacture of natural gasoline is considered second only in importance to that rendered several years ago in the famed "Saybolt case," was announced last week by Judge J. C. Hutcheson of the Southern District of Texas in the District Court of United States. The case was that of the Carbide and Carbon Chemicals Corp. vs. The Texas Company, involving alleged infringements of patents owned by the plaintiff which are the basis of the so-called stabilizer process used in the manufacture of natural gasoline.

In his decision, Judge Hutcheson held that the three patents on which the plaintiff's claims were based were invalid, thus sustaining the defendant's contention that they had been anticipated by a prior art. Upon this basis the case was dismissed for want of equity. Although no announcement has been made it is assumed the decision will be appealed.

The decision is the first to be made involving the stabilizer patents. The suit against The Texas Company was filed early last year by the Carbide and Carbon Chemicals Corp. of New York. Testimony in the case was taken the latter part of last year.

Previous to the filing of the suit the plaintiff corporation had licensed the process through a royalty agreement to several manufacturers of natural gasoline. The process is based on a rectifying column which enabled the manufacturers through changes in fractionation methods to secure a more stable finished product for which there was a better market than for the "wild" gasoline which it replaced.

Infringement suits were filed against The Texas Company and the Phillips Petroleum Co. The latter case is being tried in the Federal District Court at Wilmington, Del. The testimony in the case was presented in June and arguments will be heard in October. Many of the issues in the Phillips and the Texas cases are the same. Developments in the two cases have been closely watched by the entire natural gasoline industry. The principle of stabilization is becoming of increasing importance in the industry. It has been assumed that additional manufacturers would be drawn into litigation later should the claims of the Carbide and Carbon Chemicals Corp. be upheld.

Three Patents

The three patents owned by the plaintiff corporation upon which the suit against The Texas Company were based were Nos. 1,465,598, 1,429,175 and 1,523,314. The first, which is known as the De Brey, was filed June 1, 1918. It was purchased by the plaintiff after it had been granted. The other patents were taken out in 1921 and 1923 in the name of Thompson, an employe of the corporation. It was alleged that The Texas Company had infringed several claims of each patent.

In its defense, The Texas Company denied the infringements and also attacked the validity of the plaintiff's patents based on prior art. Judge Hutcheson in his decision agreed that the defendant company had infringed the three

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AMONG THE TECHNICAL MEN

Ellis B. Abbott, until recently chief engineer of the refining department of the Humble Oil & Refining Co., has joined the Crane Export Corp. in the capacity of sales engineer.

Ellis B. Abbott

Mr. Abbott spent seven years with the Humble company and has a wide acquaintance among the refining fraternity, especially in the Gulf Coast area. He joined the company in 1920 in the capacity of construction superintendent. The following year he was made chief engineer and continued in that capacity until his recent resignation.

During the seven-year period the Humble company has expanded its refinery facilities so that now it is one of the major organizations of the petroleum industry. In his capacity as chief engineer, Mr. Abbott had a prominent part in designing and building the new facilities which represent an investment in excess of $35,000,000. The largest of the Humble's refineries is the plant located at Baytown, Tex., which has recently been enlarged so that it now has a capacity of 50,000 bbls. daily.

Previous to going with the Humble, Mr. Abbott had several years' experience in engineering work. Born in Wisconsin, he graduated from the State University in 1908, receiving the degree of Bachelor of Science in civil engineering. After leaving the university he engaged in irrigation and railroad engineering in Montana and Washington. For two years he designed steel and concrete bridges for the city of Spokane, Wash. During the war he had charge of the design of all naval air stations in this country and abroad for the United States Bureau of Yards and Docks.

In his new work, Mr. Abbott will have his headquarters in New York City. He will devote a large part of his time to engineering problems in foreign oil fields.

CONTRACT FOR REFINERY ON MANCOS STRUCTURE

FARMINGTON, N. Mex., Aug. 6.—A contract was entered into this week between the Taylor-Burke interests operating on the Mancos River structure 19 miles north of Shiprock on unsurveyed Ute Indian lands, and the Smith-Kittell refinery by the terms of which Smith-Kittell agree to put in a refinery at the structure to take care of present and prospective production. The first installation will be a still of the Smith-Kittell type that will have a capacity of 50 bbls. per day with machinery capable of handling a much greater amount of crude when production and trade warrant it.

The fact that this firm only put in a 20-bbl. still at first in the Bloomfield district, is an indication of its faith in the Mancos River structure. Work of development will go right on with R. R. Burke in charge of the drilling.

REGAL OIL REFINERY COMPLETES FIRST UNIT

At Calgary, Alberta, the Regal Oil Refinery, Ltd., is completing the construction of the first unit of its plant. The company has an Alberta charter and is capitalized at $100,000. A number of the Turner Valley independent companies own 50 per cent of the stock, the remaining 50 per cent being owned by American oil men, including Frank P. Book, president of the Century Oil Co. of Detroit.

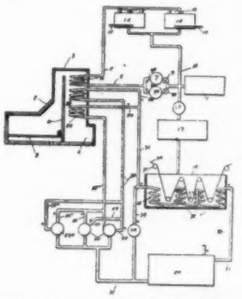
A. G. Spooner of Vulcan Oils, Ltd., is president of the company and F. Huff is vice president and general manager. J. Seifelt is secretary and J. Northurst is superintendent. It is expected the first unit will be in operation by the middle of August. A number of filling stations are being established in Calgary. The company will operate largely on Turner Valley crude.

NEW ABSORPTION PLANT

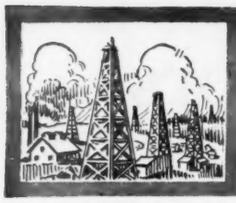
SHREVEPORT, La., Aug. 6.—Magnolia Petroleum Co. has started construction of a small gasoline absorption plant at its tank farm and compression plant between Spring Hill and Sarepta, La. The plant will handle gas from the Cotton Valley and Carterville Fields.

Recent Patents

1,636,271. Preparation of Saturants. Joseph Zavertnik, Jr., Chicago, assignor to the Barrett Company, a corporation of New Jersey. Filed January 7, 1924. Serial No. 684,914. 8 Claims. (Cl 196—87.)



5. The process which comprises heating an asphalt saturant and transferring it to a tank, and by means of the same source of heating an oil having a boiling point above that of water and circulating it between the source of heat and said tank to maintain the temperature of said asphalt.



REFINERY AND CRUDE PRICES

Quotations on Principal Refined Products and Crude Petroleum Markets in All the American Oil Fields

GASOLINE AND NAPHTHA

	Aug. 9		Aug. 2		July 26	
OKLAHOMA (Group 3)—						
50-52 450 endpoint (Naphtha)	.06½		.06½	.06¾	.06½	.06¾
56-58 450 endpoint	.06⅜	.06½	.06½	.06¾	.06½	.06¾
58-60 450 endpoint	.06⅜	.06½	.06⅝		.06⅝	.06¾
58-60 437 endpoint (U. S. Motor)	.06½	.06¾	.06¾	.07	.07	
60-62 400 endpoint	.06¾	.06⅞	.07		.07⅛	.07¼
64-66 375 endpoint	.06⅞	.07	.07⅛	.07¼	.07¼	.07⅜
68-70 360 endpoint	.07¼	.07½	.07½		.07½	.07¾
64-66 437 endpoint (blend)	.06⅜	.06½	.06½	.06⅝	.06½	.06⅝
KANSAS—						
58-60 437 endpoint (U. S. Motor)	.06¾		.07		.07	.07¼
NORTH TEXAS—						
56-58 437 endpoint	.06	.06¼	.06¼	.06½	.06½	.06¾
58-60 450 endpoint	.06	.06¼	.06	.06½	.06½	.06⅝
58-60 437 endpoint (U. S. Motor)	.06⅜	.06½	.06½	.06⅝	.06¾	.07
60-62 400 endpoint	.06⅝	.06¾	.06¾	.07	.07	.07⅛
64-66 390 endpoint	.06¾		.07		.07⅛	.07¼
64-66 375 endpoint	.06¾	.06⅞	.07	.07¼		.07¼
68-70 360 endpoint	.06⅞	.07¼	.07¼	.07½	.07¼	.07½
64-66 437 endpoint (blend)	.06⅛	.06¼	.06⅜	.06½	.06½	.06⅝
NORTH LOUISIANA—						
56-58 437 endpoint (U. S. Motor)	.06½	.07	.06¾	.07¼	.07¼	
ARKANSAS—						
58-60 437 endpoint (U. S. Motor)	.06½	.07	.06¾	.07¼	.07¼	
PENNSYLVANIA—						
52-54 Naphtha	.08¼	.08⅝	.08	.08¾	.08	.08¾
54-56 Naphtha	.08¼	.08½	.08½	.08¾	.08½	.08¾
58-60 Gasoline	.08¼	.08½	.08½	.09	.08½	.09
60 Gasoline	.09¼	.09½	.09¼	.09½	.09¼	.09½
62 Gasoline	.10	.10¼	.10	.10¼	.10	.10¼
64 Gasoline	.10¼	.10½	.10¼	.10½	.10¼	.10½
CALIFORNIA—						
58-60 437 endpoint (U. S. Motor) domestic	.09½	.10½	.09½	.10½	.09½	.10½
CHICAGO DISTRICT (Based on Group 3)—						
50-52 450 endpoint (Naphtha)	.06½		.06½	.06¾	.06¾	.07
56-58 450 endpoint	.06½		.06⅝	.06¾	.06¾	
58-60 437 endpoint (U. S. Motor)	.06½	.06¾	.06¾	.07	.07	.07⅛
60-62 400 endpoint	.06¾	.07	.07⅛	.07¼	.07¼	.07⅜
64-66 375 endpoint	.07⅛	.07¼	.07½		.07½	
68-70 360 endpoint	.07½		.07⅝		.07¾	
64-66 437 endpoint (blend)	.06⅜	.06½	.06½	.06⅝	.06¾	

NATURAL GASOLINE

	Aug. 9		Aug. 2		July 26	
OKLAHOMA (Group 3)—						
Grade A, 72-79.9, 375 e.p., rec. 90%	.05½	.05⅝	.05		.05	.05⅛
Grade AA, 80-87.9, 375 e.p., rec. 90%	.05½	.05¾	.04¾	.05	.04¾	.05
Grade B, 76-83.9, 375 e.p., rec. 85%	.05⅛	.05¼	.04⅝		.04½	
Grade BB, 84-92, 375 e.p., rec. 85%	.05⅛	.05¼	.04½	.04⅝	.04½	
Grade C, 80-90, 375 e.p., rec. 78%	.04¾	.04⅞	.04½		.04⅜	.04½
NORTH TEXAS—						
Grade A, 72-79.9, 375 e.p., rec. 90%	.05½	.05¾	.05		.05	
Grade AA, 80-87.9, 375 e.p., rec. 90%	.05½	.05¾	.04¾	.04⅞	.04¾	.05
Grade B, 76-83.9, 375 e.p., rec. 85%	.05⅛	.05¼	.04½	.04⅝	.04½	.04⅝
Grade BB, 84-92, 375 e.p., rec. 85%	.05⅛	.05¼	.04½	.04⅝	.04½	.04⅝
Grade C, 80-90, 375 e.p., rec. 78%	.04¾	.05	.04½		.04⅜	
NORTH LOUISIANA—						
Grade AA, 80-87.9, 375 e.p., rec. 90%	.05¼	.05½	.05		.05	.05¼
Grade BB, 84-92, 375 e.p., rec. 85%	.05	.05¼	.04½	.05⅝	.04⅝	.04¾
Grade C, 80-90, 375 e.p., rec. 78%	.04¾	.05	.04½		.04½	.04⅝
CALIFORNIA—						
75-85, 370, 390 endpoint	.08	.09	.08	.09	.08	.09
CHICAGO DISTRICT (Based on Group 3)—						
Grade A, 72-79.9, 375 e.p., rec. 90%	.05½		.05		.05	.05⅛
Grade AA, 80-87.9, 375 e.p., rec. 90%	.05½		.04¾		.04¾	
Grade B, 76-83.9, 375 e.p., rec. 85%	.05¼		.04½		.04½	
Grade BB, 84-92, 375 e.p., rec. 85%	.05¼		.04½		.04½	
Grade C, 80-90, 375 e.p., rec. 78%	.04¾	.05	.04½		.04⅜	

BURNING OIL

	Aug. 9		Aug. 2		July 26	
KANSAS—						
41-43 water white Kerosene	.04¼	.04½	.04¼	.04½	.04¼	.04½
OKLAHOMA (Group 3)—						
41-43 water white Kerosene	.04	.04¼	.04	.04¼	.04	.04¼
42-44 water white Kerosene	.04⅜	.04½	.04⅜	.04½	.04⅜	.04½
NORTH LOUISIANA—						
41-43 prime white Kerosene	.04¼	.04½	.04¼	.04½	.04¼	.04½
NORTH TEXAS—						
41-43 water white Kerosene	.03¾	.03⅞	.03¾	.03⅞	.03⅞	.04
40-42 water white Kerosene	.03¾		.03¾		.03¾	.03⅞
ARKANSAS—						
41-43 water white Kerosene	.04¼	.04½	.04¼	.04½	.04¼	.04½
PENNSYLVANIA—						
43 Kerosene prime white	.05⅞	.06⅛	.05⅞	.06⅛	.05⅞	.06⅛
45 Kerosene water white	.06	.06¼	.06	.06¼	.06	.06¼
46 Kerosene water white	.06¼	.06½	.06¼	.06½	.06¼	.06½
47 Kerosene water white	.06¾	.07	.06¾	.07	.06¾	.07
300 Mineral Seal	.07	.07¼	.07	.07¼	.07	.07¼
CALIFORNIA—						
38-40 water white Kero. (high burning test)	.05¼	.05¾	.05¼	.05¾	.05¾	.06½
Engine distillate, 43-45 445 endpoint	.08	.08½	.08	.08½	.08	
Engine distillate, 42-44 480 endpoint	.07¾	.08	.07¾	.08	.07¾	.08
CHICAGO DISTRICT (Based on Group 3)—						
41-43 water white Kerosene	.04	.04¼	.04	.04¼	.04	.04⅛
42-44 water white Kerosene	.04¼	.04½	.04¼	.04½	.04⅜	.04½

FUEL OILS

	Aug. 9		Aug. 2		July 26	
KANSAS—						
22-26 Fuel Oil	.90	.95	.92½	.95	.90	.95
18-22 Fuel Oil	.85	.90	.85	.90		
32-36 Gas Oil	.02¾		.02¾		.02¾	.02⅞
38-40 Distillate	.03⅛	.03¼	.03⅛	.03¼	.03¼	.03½
OKLAHOMA (Group 3)—						
Below 18 Fuel Oil	.85		.85		.85	.90
18-22 Fuel Oil	.85	.87½	.85	.87½	.87½	.90
22-26 Fuel Oil	.87½	.90	.87½	.90	.90	.92½
24-26 Fuel Oil	.87½	.90	.87½	.92½	.90	.92½
26-30 Fuel Oil	.92½	.95	.92½	.95	.95	.97½
28-30 Fuel Oil	.97½	1.00	.97½	1.00	1.00	1.05
32-36 Gas Oil (dark)	.02½	.02⅝	.02⅝		.02⅝	
32-36 Gas Oil (straw overhead)	.02⅝	.02¾	.02⅝	.02¾	.02⅝	.02¾
36-38 Distillate	.03	.03⅛	.03	.03⅛	.03⅛	
38-40 Straw Distillate	.03¼		.03¼		.03¼	.03⅜
NORTH TEXAS—						
24-26 Fuel Oil (sellers' cars)	.80	.85	.80	.85	.80	.85
32-36 Gas Oil (straw)	.02½	.02¾	.02½	.02¾	.02⅝	.02¾
38-40 Straw Distillate	.03	.03⅛	.03	.03⅛	.03	.03⅛
NORTH LOUISIANA—						
18-20 Fuel Oil	1.12½	1.15	1.12½	1.15	1.12½	1.15
32-36 Gas Oil	.03	.03¼	.03	.03¼	.03	.03¼
ARKANSAS—						
36-38 Distillate	.03¼	.03½	.03¼	.03½	.03½	.03¾
32-36 Gas Oil (straw)	.03	.03⅛	.03	.03¼	.03¼	.03½
16-20 Refinery Fuel Oil	1.00	1.05	1.00	1.05	1.00	1.05
GULF COAST (South Texas)—						
Gas Oil	.04½	.04¾	.04½	.04¾	.04½	.04¾
Fuel Oil	1.60	1.65	1.60	1.65	1.60	1.65
PENNSYLVANIA—						
30-34 Fuel Oil	.03¾	.04¼	.03¾	.04¼	.04⅛	.04⅜
36-40 Fuel Oil	.04¼	.04¾	.04¼	.04¾	.04½	.05
CALIFORNIA—						
33-36 Distillate	.03¾	.04	.03¾	.04	.03¾	.04
27-32 Distillate	.03¼	.03¾	.03¼	.03¾	.03¼	.03¾
*15-20 Fuel Oil, Bunkers (at tide water)	.85	1.00	.85	1.00	.85	1.00
15-20 Fuel Oil (cargo lots)	.71	.75	.71	.75	.71	.75
27 plus Diesel	1.15	1.19	1.15	1.19	1.15	1.19
CHICAGO DISTRICT (Based on Group 3)—						
24-26 Fuel Oil (sellers' cars) Group 3	.87½	.92½	.90	.92½	.92½	.95
22-26 Fuel Oil (sellers' cars) Group 3	.87½	.90	.87½	.90	.90	.92½
18-22 (Group 3)	.85	.87½	.85	.90	.90	.92½
16-20 Smackover	1.10	1.15	1.10	1.15	1.10	1.15
32-36 Gas Oil (zero)	.03		.03	.03⅛	.03⅛	.03¼
32-36 Gas Oil (industrial)	.02¾	.03	.02¾	.03	.02¾	.03
36-38 Distillate	.03¼		.03¼		.03¼	
38-40 Straw Distillate	.03¼	.03½	.03¼	.03½	.03¼	.03½

*Bunkers.

LUBRICATING OIL AND WAX

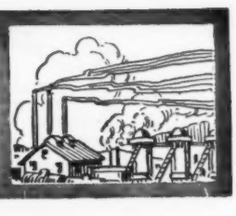
	Aug. 9		Aug. 2		July 26	
OKLAHOMA (Group 3)—						
100 vis., 2 color, 20-25 cold test	.06½	.06¾	.06½	.06¾	.06½	.06¾
100 vis., 3 color, 20-25 cold test	.06¼	.06½	.06¼	.06½	.06¼	.06½
150 vis., 3 color, 20-25 cold test	.08½	.08¾	.08½	.08¾	.08½	.08¾
150 vis., 4 color, 20-25 cold test	.08¼	.08½	.08¼	.08½	.08¼	.08½
180 vis., 3 color, 23-28 cold test	.10	.10¼	.10	.10¼	.10	.10¼
180 vis., 4 color, 23-28 cold test	.09¾	.10	.09¾	.10	.09¾	.10
180 vis., 5 color, 23-28 cold test	.09½	.10	.09½	.10	.09½	.10
200 vis., 3 color, 23-28 cold test	.10½	.11	.10½	.11	.10½	.11
200 vis., 4 color, 23-28 cold test	.10⅝	.10⅞	.10⅝	.10⅞	.10⅝	.10⅞
200 vis., 5 color, 23-28 cold test	.10½	.10¾	.10½	.10¾	.10½	.10¾
240 vis., 3 color, 25-30 cold test	.14	.14¼	.14	.14¼	.14	.14¼
240 vis., 4 color, 25-30 cold test	.13½	.13¾	.13½	.13¾	.13½	.13¾
240 vis., 5 color, 25-30 cold test	.12½	.13	.12½	.13	.12½	.13
280 vis., 3 color, 25-30 cold test	.15¾	.16¼	.15¾	.16¼	.15¾	.16¼
280 vis., 4 color, 25-30 cold test	.15¼	.15½	.15¼	.15½	.15¼	.15½
280 vis., 5 color, 25-30 cold test	.14¼	.15	.14¼	.15	.14½	.15
Cylinder Stocks:						
600, steam refined, light green	.07	.09	.07	.09	.07	.09
600, steam refined, dark green	.05	.06	.05	.06	.05	.06
190-200 vis. @ 210 Bright Stock	.31	.33	.31	.33	.31	.33
150-160 vis. @ 210 Bright Stock	.26		.26		.26	
Waxes:						
124-126 White Crude Scale Wax	.02⅜	.02½	.02⅜	.02½	.02⅜	.02½
PENNSYLVANIA—						
34 Neutral	.07¼	.07½	.07¼	.07½	.07¼	.07½
34 Sundebloom Neutral	.08½	.08¾	.08½	.08¾	.08½	.08¾
36 Miners' Neutral	.06¾	.07	.06¾	.07	.06¾	.07
150, 3 color	.28	.28¼	.28¼	.28½	.28¼	.28½
180, 3 color	.32¼	.32½	.32¼	.32½	.32¼	.32½
200, 3 color	.34¼	.34½	.34¼	.34½	.34¼	.34½
220, 3 color	.36	.36½	.34¼	.34½	.34¼	.36½
600, steam refined	.08¾	.09	.08¾	.09	.08¾	.09
635, steam refined	.10¼	.10½	.10¼	.10½	.10¼	.10½
650, steam refined	.12	.12¼	.12	.12¼	.12¼	.12½
600, Pennsylvania flash	.17½	.18	.17½	.18	.17½	.18
630, Pennsylvania flash	.26½	.27	.26½	.27	.26½	.27
*550, E filtered	.17¼	.18	.17¼	.18	.17¼	.18
*600, E filtered	.18¾	.19½	.18¾	.19½	.18¾	.19½
600, E filtered	.17¾	.18	.17¼	.17¾	.17¼	.17¾
600, D filtered	.25	.25½	.25	.25½	.25	.25½
550, E filtered	.17½	.18	.17½	.18	.17½	.18
550, D filtered	.21½	.22	.21½	.22	.21½	.22
Pennsylvania Bright Stock	.33	.35	.32½	.33	.32½	.33
†122-124 White Crude Scale Wax	.03	.03¼	.02⅞	.03¼	.02⅞	.03¼
†124-126 White Crude Scale Wax	.03	.03¼	.03⅛	.03¼	.03⅛	.03¼

*At Warren, Pa. †At New York City.

GULF COAST (South Texas)—						
No. 2 color, 100 vis., pale oil	.07	.07½	.07	.07½	.07	.07½
No. 3 color, 200 vis., pale oil	.10	.10½	.10	.10½	.10	.10½
No. 3 color, 300 vis., pale oil	.10½	.11	.10½	.11	.10½	.11
No. 3½ color, 500 vis., pale oil	.12½	.13	.12½	.13	.12½	.13
No. 4 color, 750 vis., pale oil	.15	.15½	.15	.15½	.15	.15½
No. 5 to 6 color, 200 vis., red oil	.07¾	.08¼	.07¾	.08¼	.07¾	.08¼
No. 5 to 6 color, 300 vis., red oil	.09	.09½	.09	.09½	.09	.09½
No. 5 to 6 color, 500 vis., red oil	.11	.11½	.11	.11½	.11	.11½
No. 5 to 6 color, 750 vis., red oil	.13½	.14	.13½	.14	.13½	.14
No. 2 color, 200 vis., pale filtered	.12¾	.14	.12¾	.14	.12¾	.14
No. 2 color, 300 vis., pale filtered	.14	.14½	.14	.14½	.14	.14½
No. 2½ color, 500 vis., pale filtered	.15½	.16½	.15½	.16½	.15½	.16½
No. 2½ color, 750 vis., pale filtered	.20	.20½	.20	.20½	.20	.20½
CALIFORNIA—						
130 vis., 2½-3 color	.10½	.11	.10½	.11	.10½	.11

REFINERY AND CRUDE PRICES

Quotations on Principal Refined Products and Crude Petroleum Markets in All the American Oil Fields



200 vis., 2½-3	color	.11	.11½	.11	.11½	.11	.11½
300 vis., 3 -3½	color	.11½	.12	.11½	.12	.11½	.12
350 vis., 3½-4	color	.12	.13	.12	.13	.12	.13
400 vis., 3½-4	color	.13	.15½	.13	.15½	.13	.15½
Red Neutral:							
200 vis., 4½-5	color	.09½	.10½	.09½	.10½	.09½	.10½
300 vis., 5 -6	color	.10½	.11	.10½	.11	.10½	.11
400 vis., 5 -6	color	.12	.13½	.12	.13½	.12	.13½
500 vis., 4½-5	color	.13½	.14½	.13½	.14½	.13½	.14½
500 vis., 5 -6½	color	.12½	.13½	.12½	.13½	.12½	.13½
600 vis., 6 plus	color	.13½	.14½	.13½	.14½	.13½	.14½

Note: Bright stocks are not manufactured commercially on the Pacific Coast.

NEW YORK (BAYONNE) REFINERY PRICES

	Aug. 9		Aug. 2		July 26
Gasoline, U. S. Motor, 58-60 437	.08½		.08½		.08¾
Kerosene, water white, 41-43	.06¾	.07	.06¾	.07	.07
*Fuel Oil, bunker "C," 14-16, per bbl.	1.65		1.65		1.65
*Fuel Oil, Diesel, 28-30, per bbl.	2.00		2.00		2.20
Gas Oil, 28 plus	.05½		.05½		.05½
25 pale Paraffin Oil	.12		.12		.12
28 pale Paraffin Oil	.07¼		.07¼		.07¼
285 red Paraffin Oil	.12½		.12½		.12¾
250 red Paraffin Oil	.11½		.11½		.11¾
225 red Paraffin Oil	.10½		.10½		.10¾
200 red Paraffin Oil	.09½		.09½		.09¾
Refined Wax:					
120-122 a.m.p., per lb.	.03⅞		.03⅞		.03⅞
125-127 a.m.p., per lb.	.04		.04		.04
130-132 a.m.p., per lb.	.04½		.04½		.04½
135-137 a.m.p., per lb.	.05		.05		.05
Petrolatum, in bbls., carload lots, per lb.:					
Dark green	.01¾		.01¾		.01¾
Amber	.03¼		.03¼		.03¼
Extra amber	.03⅝		.03⅝		.03⅝
Cream	.05⅝		.05⅝		.05⅝
Lily white	.07		.07		.07
Snow white	.08		.08		.08

*Lighterage 6.5c a barrel extra.

NEW YORK (BAYONNE) EXPORT PRICES

	Aug. 9	Aug. 2	July 26
Gasoline, U. S. Motor, 58-60 437, in cases	.2440	.2440	.2440
Kerosene, standard white, in cases	.1615	.1615	.1615
Kerosene, water white, in cases	.1715	.1715	.1715
600 steam refined cylinder stock, in bbls.	.17	.17	.17
635 steam refined	.19	.19	.19
650 steam refined	.20	.20	.21
600 Pennsylvania flash	.24	.24	.25
630 Pennsylvania flash	.32	.32	.34
600 Warren E	.26	.26	.26
600 Oil City E	.24½	.24½	.24½
Light 135 Bright Stock	.42	.42	.41
Dark 135 Bright Stock	.40	.40	.39

LOS ANGELES EXPORT PRICES

	Aug. 9		Aug. 2		July 26	
Kerosene water white	.04⅛	.04⅜	.04⅛	.04⅜	.04¼	.04½
U. S. Motor Gasoline, 53-55 437 e.p.	.06¼	.06¾	.06¼	.06¾	.06¼	.06¾

CALIFORNIA CRUDE PRICES

***Standard Oil Co.-Union Oil Co. (Effective April 1, 1927)**

Gravity—	Fullerton, Seal Beach, Long Beach, Huntington Beach, Richfield, Rosecrans-Dom'guez, Torrance-Inglewood [1]	Whittier, La Habra, [2]Montebello	Kern River, Newhall-McKittrick, Midway-Sunset, [3]Elk Hills, Lost Hills, Belridge, Buena Vista Hills, [4]Coyote	[5]Santa Fe Springs	Coalinga [6]	[7]Wheeler Ridge	Santa Maria, Ventura, Orcutt, [8]Salt Lake
14°	.85	.85	.75 .85	....	.75	.75	.85
15°	.85	.85	.75 .85	....	.75	.75	.85
16°	.85	.85	.75 .85	....	.75	.75	.85
17°	.85	.85	.75 .85	....	.75	.75	.85
18°	.85	.85	.75 .85	....	.75	.75	.85
19°	.85	.85	.77 .85	....	.76	.76	.85
20°	.86	.85	.79 .86	.85	.77	.77	.85
21°	.87	.85	.81 .87	.85	.78	.78	.85
22°	.88	.85	.83 .88	.85	.79	.79	.85
23°	.89	.85	.85 .89	.85	.80	.80	.85
24°	.90	.86	.87 .90	.86	.81	.81	.86
25°	.92	.87	.89 .91	.87	.82	.82	.87
26°	.94	.88	.91 .92	.88	.85	.83	.88
27°	.96	.89	.93 .93	.89	.87	....	.89
28°	.98	.90	.96 .94	.91	.89	....	.91
29°	1.00	.91	.99 .95	.93	.91	....	.93
30°	1.03	....	1.02	.95	.93	....	.95
31°	1.06	....	1.05	.97	.95	....	.97
32°	1.09	....	1.08	.99	.97	....	.99
33°	1.12	....	1.11	1.01	.99	....	1.01
34°	1.15	....	....	1.03	1.01	....	1.03
35°	1.18	....	....	1.06	....	....	1.06
36°	1.21	....	....	1.09	....	....	1.09
37°	1.24	....	....	1.12	....	....	1.12
38°	1.27	....	....	1.15	....	....	1.15
39°	1.30	....	....	....	....	....	....
40°	1.33	....	....	....	....	....	....
41°	1.36	....	....	....	....	....	....
42°	....	....	....	....	....	....	....

*Column 1—Long Beach, Seal Beach and Huntington Beach crudes, 14 to 32 degrees, inclusive; Richfield and Fullerton, 14 to 30 degrees; Torrance and Inglewood, 14 to 28 degrees; Dominguez, 24 to 42 degrees. Rosecrans crude ranges from 14 to 42 degrees, but only Union Oil Co. posts below 24 degrees.

Column 2—Whittier crude, 14 to 22 degrees; Montebello, 14 to 30 degrees.

Column 3—Kern River, Newhall and McKittrick, 14 to 19 degrees; Midway-Sunset, Buena Vista and Elk Hills, 14 to 33 degrees; Lost Hills and Belridge, 14 to 34 degrees.

Column 8—Salt Lake, 14 to 19 degrees, inclusive; Santa Maria, 14 to 30 degrees; Ventura and Orcutt, 14 to 39 degrees. Posted only by Union Oil Co.

CRUDE OIL GRAVITY PRICE TABLE

Gravity—	Okla., Kans., N. C. Tex., La.-Ark. [1]	Smackover, Ark. [2]	Stephens, Ark. [3]	Wheeler and Gray Counties, (Texas Panhandle) [4]	Crane, Upton Crockett Counties (West Texas) [5]	Salt Creek, Wyo. [6]	Grade B & Light Crude (G. Coast) [7]	Somerset, (South Central Texas) [8]
Below 24	....	1.00	....	....	....	....	....	....
24 and above	....	1.25	....	....	....	....	....	....
Below 25	....	....	....	....	....	....	1.16	....
25 to 25.9	....	....	....	....	....	....	1.17	....
Below 26	....	....	....	.70	....	....	....	....
26 to 26.9	....	....	....	.72	....	....	1.19	....
27 to 27.9	....	....	....	.74	....	....	1.21	....
Below 28	****	....	1.00	....	....	....	....	....
28 to 28.9	1.12	....	1.02	.80	.76	....	1.23	....
29 to 29.9	1.14	....	1.04	.82	.78	1.14	1.25	....
30 to 30.9	1.16	....	1.06	.84	.80	1.16	1.27	....
31 to 31.9	1.18	....	1.08	.86	.82	1.18	1.29	....
32 to 32.9	1.20	....	1.10	.88	.84	1.20	1.31	1.05
33 to 33.9	1.22	....	....	.90	.86	1.22	1.33	1.07
34 to 34.9	1.24	....	....	.92	.88	1.24	1.35	1.09
35 to 35.9	1.26	....	....	.94	.90	1.26	1.37	1.11
36 to 36.9	1.28	....	....	.96	.92	1.28	....	1.13
37 to 37.9	1.30	....	....	.98	....	1.30	....	1.15
38 to 38.9	1.32	....	....	1.00	....	....	....	1.17
39 to 39.9	1.34	....	....	1.02	....	....	....	....
40 to 40.9	1.36	....	....	1.04	....	....	....	....
41 to 41.9	1.38	....	....	1.06	....	....	....	....
42 to 42.9	1.40	....	....	1.08	....	....	....	....
43 to 43.9	1.42	....	....	1.10	....	....	....	....
44 to 44.9	1.44	....	....	1.12	....	....	....	....
45 to 45.9	1.46	....	....	....	....	....	....	....
46 to 46.9	1.48	....	....	....	....	....	....	....
47 to 47.9	1.50	....	....	....	....	....	....	....
48 to 48.9	1.52	....	....	....	....	....	....	....
49 to 49.9	1.54	....	....	....	....	....	....	....
50 to 50.9	1.56	....	....	....	....	....	....	....
51 to 51.9	1.58	....	....	....	....	....	....	....
52 and above	1.60	....	....	....	....	....	....	....

Column 1—Magnolia Petroleum Co. posted new schedule May 5, making price below 38 gravity $1.05 per barrel, with 2 cents increase per degree higher in gravity, taking 33-33.9 gravity at $1.07 as basis, with a top price of $1.45 for 52 and above.

Oklahoma: Prairie Oil & Gas Co., Sinclair Oil & Gas Co., Gypsy Oil Co., March 12; Carter Oil Co., The Texas Company, March 14.

North Central Texas—(Including Ranger, Mexia, Powell, Richland, Wortham, Lytton Springs (Southwest Texas), Iatan and Panola (Magnolia only), Currie, Nocona, Moran and Corsicana light); Texas, Prairie, Sinclair and Gulf, March 12; The Texas Company, Humble Oil & Refining Co., March 14.

Kansas—Prairie, Sinclair, March 12; Carter, Texas, March 14.

Arkansas and North Louisiana—(Caddo, Bull Bayou, Crichton, DeSoto, Haynesville, Homer and El Dorado only); Standard Oil Co. of Louisiana, March 14; The Texas Company, March 14; Magnolia Petroleum Co., Pine Island, Haynesville and Bull Bayou, El Dorado, Gulf Pipe Line Co., March 14.

Column 2—Standard Oil Co. of Louisiana, The Texas Company, Gulf, Atlantic, March 17, Magnolia Petroleum Co. (March 16) posted price of $1 for below 24 degrees and $1.15 for 24 and above. Louisiana Oil Corp., July 6 and Atlantic Oil Producing Co., July 7.

Column 3—Atlantic Oil Producing Co., March 14.

Column 4—Humble Oil & Refining Co. and Gulf Pipe Line Co., March 14.

Column 5—Humble Oil & Refining Co., Kay County Gas Co. and Gulf Pipe Line Co., March 14.

Column 6—Midwest Refining Co., March 12. All crude over 37 gravity, $1.30 per barrel.

Column 7—Humble Oil & Refining Co. and other major buyers (schedule ends "35 and above"), March 14, with exception of Magnolia Petroleum Co., which stops at 31 degrees gravity. Sun Pipe Line Co. posts 2 cents differential for each degree above 35 gravity and $1.47 for 40 gravity and above.

Column 8—Grayburg Pipe Line Co. and Pioneer Oil & Refining Co., April 7.

****Prices for crude below 28 gravity; Oklahoma, Kansas and Texas, Magnolia Petroleum Co., $1.10, March 12; Arkansas, North Louisiana, March 14. Other companies, 2 cents less for each degree with exception of Humble Oil & Refining Co., which pays $1.12 for crude below 28 degrees gravity.

CRUDE OIL PRICES

OKLAHOMA, KANSAS, NORTH AND EAST CENTRAL TEXAS

*Corsicana heavy (March 14, 1927)	$1.00
Other fields	See gravity table

*Posted by Magnolia Petroleum Co.

TEXAS PANHANDLE

*Carson County	$ .95
*Hutchinson County	.95
Gray-Wheeler Counties	See gravity table

*Humble Oil & Refining Co., Magnolia Petroleum Co., Gulf Pipe Line Co. and Kay County Gas Co., March 14.

WEST TEXAS

*Iatan (same as North Texas).	
Crane-Upton-Crockett	See gravity table

*Includes Howard County and Westbrook Fields. Kay County Gas Co. pays $1.05 for Howard County crude, effective May 21.

ARKANSAS-NORTH LOUISIANA

Cotton Valley (March 17)	$1.00
Bellevue (Feb. 24, 1927)	1.25
Urania (March 16, 1927)	1.00
East El Dorado (March 16)	1.00
Other fields	See gravity table

Note—Cotton Valley and Bellevue, Standard Oil Co. of Louisiana, Gulf Refining Co. and Magnolia Petroleum Co.; Urania, Louisiana Oil Refining Corp.; East El Dorado, Magnolia Petroleum Co.

GULF COAST

(Goose Creek, Hull, Liberty, West Columbia, Orange, Boling, Sour Lake, Humble, High Island, Pierce Junction and Spindletop).

‡Grade A, (March 14)	$1.20
Grade B	See gravity table
*Jennings, La. (March 14)	1.05
†Saratoga, Batson, Dayton (March 14, 1927)	1.20
**Markham (March 14)	1.00

*Gulf Pipe Line Co. †Sun Pipe Line Co. ‡Humble Oil & Refining Co. and other major buyers. **The Texas Company.

SOUTH CENTRAL AND SOUTHWESTERN TEXAS

*Luling (May 5)	$1.00
†Mirando (March 14)	1.00
Rockdale-Minerva (April 15):	
38-38.9 gravity	1.27
39-39.9 gravity	1.29
40 and above	1.31
*Thrall	....
Callihan (May 15)	1.75
Lytton Springs (Lockhart)	See gravity table
Somerset	See gravity table

*Posted by Magnolia Petroleum Co. Thrall prices same as north central Texas less 19½ cents per cwt. freight.

†Magnolia Petroleum Co., Humble Oil & Refining Co., Crown Central Pipe Line Co.

*2 cents differential per degree above 37.9 gr. to 40 and above at $1.31

ROCKY MOUNTAIN STATES

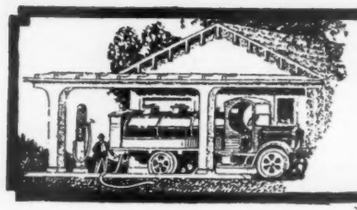
Ohio Oil Co.-Midwest Refining Co.

(Effective March 14)

Rock Creek, Wyo. (March 12)	$1.25
Salt Creek	See gravity table
Big Muddy (March 12)	1.25
Mule Creek (May 1)	1.10
Grass Creek, heavy	.90
Grass Creek, light	1.33
Elk Basin (March 12)	1.33
Lance Creek (March 12)	1.33
Poison Spider	1.00
Notches	.65
Rex Lake (February 22)	1.10
Osage	1.33
Lost Soldier (contract)	.95
Greybull-Torchlight	1.33
Hamilton Dome	.85
Cat Creek (Mont.)	1.33
Sunburst (Mont.)	1.35
Artesia (March 12)	1.00
Hogback (N. Mex.) (March 14)	1.38

Note: Salt Creek, Osage, Cat Creek, Greybull and Hogback posted by Midwest Refining Co., and the remainder by the Ohio Oil Co. Both companies post Grass Creek light and Elk Basin.

(Continued on Page 134)



TANK WAGON MARKETS

Tank wagon quotations for gasoline and kerosene in United States as furnished by the larger marketing concerns August 9.

ALL TANK WAGON AND SERVICE STATION QUOTATIONS INCLUDE TAXES

STANDARD OIL CO. (INDIANA)

	Gasoline Tank wag'n	Gasoline Service station	Gasoline Inclds tax of	Kero. Tank wag'n
Chicago dist. ..	16.0	18.0	2.0	12.0
Decatur, Ill. ..	16.2	18.2	2.0	12.1
E. St. Louis ...	15.1	17.35	2.0	11.2
Joliet	16.4	18.4	2.0	12.3
Peoria	12.0	14.0	2.0	12.1
Quincy	16.2	18.2	2.0	8.9
Davenport, Ia..	17.5	19.5	3.0	12.3
Des Moines	17.0	19.0	3.0	12.3
Keokuk	17.5	19.5	3.0	12.3
Sioux City	17.1	19.1	3.0	11.9
Duluth, Minn ..	15.5	17.5	2.0	12.9
Minneapolis ...	14.0	14.0	2.0	12.9
Mankato	17.1	19.1	2.0	12.7
LaCross, Wis. .	17.2	19.2	2.0	13.0
Milwaukee	16.1	18.1	2.0	11.9
Madison	16.3	18.3	2.0	12.1
Detroit, Mich. .	16.8	18.8	2.0	12.7
Grand Rapids .	15.0	17.0	2.0	13.6
Saginaw	16.9	18.9	2.0	13.6
Evansville, Ind.	17.0	19.0	3.0	13.0
Ft. Wayne	17.4	19.4	3.0	13.4
Indianapolis ..	17.2	19.2	3.0	13.2
South Bend	17.4	19.4	3.0	13.4
Fargo, N. D. ..	17.0	19.0	2.0	14.9
Huron, S. D. ..	19.5	21.5	4.0	13.9
Sioux Falls ...	18.1	20.1	4.0	13.4
K. C., Mo.	14.9	16.9	3.0	10.6
*Springfield ...	16.8	18.8	3.0	11.5
*St. Louis	15.6	17.9	2.5	11.3
*St. Joseph	16.5	18.5	3.0	11.2
Wichita, Kans..	14.8	16.8	2.0	10.8
Bartlesville, Ok.	15.8	17.8	3.0	10.8

NAPHTHAS

	Tank wagon	Tank car
Oleum spirits	16.0	10.75
V. M. & P. naphtha	18.0	12.75
Cleaner's naphtha	18.0	13.75
Stanisol	19.0	14.75

Tank wagon prices f.o.b. Chicago; tank car prices f.o.b. Whiting.

STANOLIND FURNACE OIL

Less than 100 gallons	9.0
100 to 799 gallons	8.0
800 or more gallons	7.5

Tank wagon prices of gasoline subject to discount of 1 cent a gallon on dumps of 50 gallons or more throughout territory except Chicago district where discount applies only to dumps of 100 gallons. Kerosene subject to 1 cent discount on dumps of 50 gallons or more.

Outside the Chicago district, the following quantity discount schedule is in effect on monthly tank wagon deliveries of gasoline: 6,000 gallons or more, 1½ cents; 10,000 gallons or more, 2 cents; 15,000 gallons or more, 3 cents. These discounts include the 1 cent allowed on dumps of 50 gallons or more at one delivery.

Within the Chicago district, the following quantity discount schedule is in effect on tank wagon deliveries of gasoline: 750 to 2,000 gallons, one-half cent; 2,000 to 3,000 gallons, three-fourths cent; 3,000 to 6,000 gallons, 1 cent; 6,000 to 10,000 gallons, 1¼ cents; 10,000 to 15,000 gallons, 2 cents; 15,000 gallons or more, 3 cents. These discounts are in addition to the special discount of 1 cent on dumps of 100 gallons or more at one delivery.

If the quantity bought during the year is equal to or exceeds 12 times the agreed monthly quantity, the discount is paid or credited on the entire quantity at the close of the term less the monthly payments made during the year.

*State tax 2 cents; remainder city tax.

OHIO

Standard Oil Co. (Ohio)

	Gasoline Tank wag'n	Gasoline Service station	Gasoline Inclds tax of	Kero. Tank wag'n
All Ohio points	19.0	21.0	3.0	14.5

SOUTHWESTERN DISTRICT

Magnolia Petroleum Co.*

	Gasoline Tank wag'n	Gasoline Service station	Gasoline Inclds tax of	Kero. Tank wag'n
Dallas, Tex. ...	15.0	18.0	3.0	11.0
Fort Worth ...	15.0	18.0	3.0	10.0
Houston	15.0	19.0	3.0	15.0
San Antonio ..	15.0	18.0	3.0	11.0
El Paso	17.0	19.0	3.0	16.0
Texarkana	15.0	18.0	3.0	12.0
Muskogee, Ok. .	15.0	18.0	3.0	9.0
Okla. City	15.0	18.0	3.0	9.0
Tulsa	15.0	18.0	3.0	9.0
Ft. Smith, Ark.	14.0	17.0	5.0	12.0
Little Rock ..	18.0	21.0	5.0	12.0

*The following is the schedule of discounts on quantity gasoline sales adopted by the Magnolia Petroleum Co. in Oklahoma: Over 750 gallons a month, one-half cent; over 2,000 gallons, three-quarters cent; over 3,000 gallons, 1 cent; over 4,500 gallons, 1¼ cents; over 6,000 gallons, 1½ cents; over 8,000 gallons, 1¾ cents; over 10,000 gallons, 2 cents. If the quantity bought during the year is 12 times the monthly agreed purchases, the discount will be paid or credited on the entire quantity for the year less any monthly purchases.

The schedule on service station deliveries is: Over 200 gallons a month, 1 cent; over 300 gallons a month, 1¼ cents; over 400 gallons, 1½ cents; over 500 gallons a month, 1¾ cents; over 600 gallons, 2 cents. The same rule applies for annual purchases in the tank wagon discounts.

CENTRAL SOUTH DISTRICT

Standard Oil Co. (Louisiana)

	Gasoline Tank wag'n	Gasoline Service station	Gasoline Inclds tax of	Kero. Tank wag'n
*N. Orleans, La.	15 5	18.5	3.0	14.0
Baton Rouge .	14.0	17.0	2.0	12.5
Alexandria	15.0	18.0	2.0	14.0
LaFayette	15.0	18.0	2.0	13.5
Lake Charles .	14.5	17.0	2.0	12.5
Shreveport	15.5	18.5	2.0	13.0
Kn'xville, T'nn.	19.5	22.5	3.0	15.0
Memphis	15.0	18.0	3.0	14.0
Chattanooga ..	19.5	22.5	3.0	15.0
Nashville	18.0	21.0	3.0	15.0
Bristol	19.0	22.0	3.0	14.0
Lit. Rock, Ark.	18.0	21.0	5.0	12.0

*Tax of 3 cents includes city tax of 1 cent.
*Louisiana kerosene prices include 1-cent state tax and 1-cent parish tax.

SOUTHERN DISTRICT

Standard Oil Co. (Kentucky)

	Gasoline Tank wag'n	Gasoline Service station	Gasoline Inclds tax of	Kero. Tank wag'n
Atlanta, Ga. ..	18 0	21 0	4.0	15 0
Augusta	18.0	19.0	4.0	16.0
Macon	19.0	22.0	4.0	16.0
Savannah	16 0	18.0	4.0	14.0
Birm'h'm, Ala.	18 0	21 0	4.0	15.5
Mobile	17 0	20.0	4 0	15 0
Montgomery ..	19 0	22.0	5 0	16 5
Clarks'le, Miss.	17.0	20 0	4.0	12.5
Jackson	17 0	20 0	4.0	14 5
Natchez	16.5	19.5	4.0	14 0
Gulfport	18.5	21.5	6 0	14.0
Vicksburg	16 5	19 5	4.0	14 0
Jack'ville, Fla.	18 0	21 0	5 0	14.0
Miami	20 0	23 0	5 0	14 0
Pensacola	19.0	22.0	5 0	15 5
Tampa	17 0	20 0	5.0	15.0
Lexingtan, Ky.	18 0	21.0	5.0	15.5
Covington, Ky..	19.0	22 0	5.0	15.5
Louisville	19.0	22.0	5.0	13.5

In addition to the state tax of 2 cents on gasoline, Montgomery has city tax of 1 cent on gasoline and one-half cent on kerosene. Prices in Georgia include one-half cent inspection fee on gasoline and kerosene; in Florida, an inspection fee of 0.125 cent; in Alabama, an inspection fee of one-half cent on kerosene only. Pensacola tax includes 1 cent city levy. Gulfport tax includes privilege tax of 2 cents in addition to state tax.

PENNSYLVANIA-DELAWARE AND PART NEW ENGLAND

Atlantic Refining Co.

	Gasoline Tank wag'n	Gasoline Service station	Gasoline Inclds tax of	Kero. Tank wag'n
Pittsburgh, Pa..	16.0	*22.0	...	14 0
Philadelphia ..	14.0	17.0	...	14 0
Scranton	16.0	*22.0	...	14.0
Allentown	16.0	*22.0	...	14.0
Altoona	16.0	*22.0	...	14.0
Erie	14 0	*18.0	...	14.0
Dover, Del.	19.0	22.0	3.0	14.0
Wilmington ...	19.0	22 0	3.0	14.0
Spring'd, Mass.	17.0	17.0	...	15.0
Worchester ...	17.0	17.0	...	15.0
Boston	17.0	17.0	...	15.0
Providence, R.I.	19.0	19.0	2.0	15.0
Hartford, Conn.	21.0	22.0	2.0	15.0
New Haven ..	21.0	22.0	2.0	15.0

*Includes tax of 3.0 cents. Pennsylvania tax is collected by the dealer and paid by him direct to the state.

NEW YORK AND PART OF NEW ENGLAND DISTRICT

Standard Oil Co. (New York)

	Gasoline Tank wag'n	Gasoline Service station	Gasoline Inclds tax of	Kero. Tank wag'n
Albany, N. Y. .	17.0	19.0	...	15.0
*New York	17.0	19.0	...	15.0
Buffalo	17.0	19.0	...	14.0
Rochester	13.0	16.0	...	14.0
Syracuse	17.0	19.0	...	15.0
Boston, Mass. .	17.0	19.0	...	15.0
Augus.a, Me. ..	20.0	26.0	3.0	15.0
M'nch't'r, N.H.	17.0	21.0	2.0	15.0
Burlington, Vt.	19.0	21.9	2.0	15.0

*Price in steel barrels.

PACIFIC COAST DISTRICT

Standard Oil Co. (California)

	Gasoline Tank wag'n	Gasoline Service station	Gasoline Inclds tax of	Kero. Tank wag'n
San Francisco .	17.0	21.0	3.0	15.5
Pueblo	18.0	18.0	3.0	15.5
Los Angeles ..	16.5	20.5	3.0	15.5
Reno, Nev.	22.0	26.0	4.0	19.0
Portland, Ore. .	17.5	21.5	3.0	16.5
Seattle, Wash..	16.5	20.5	3.0	16.5
Tacoma	16.5	20.5	2.0	16.5
Spokane	20.5	24.5	2.0	20.5
Phoenix, Ariz. .	22.0	26.0	3.0	20.5

ATLANTIC COAST DISTRICT

Standard Oil Co. (New Jersey)

	Gasoline Tank wag'n	Gasoline Service station	Gasoline Inclds tax of	Kero. Tank wag'n
Atlantic City ..	18 0	....	2 0	14.0
Newark, N. J..	18 0	20.0	2.0	14.0
Annapolis, Md..	20 0	23 0	4.0	12 0
Paltimore	20 0	23.0	4 0	10.0
Cumberland ...	20.0	23.0	4.0	14.0
Washington ...	18 0	21.0	2.0	12 0
Danville, Va. ...	20 5	....	4.5	14.0
Norfolk	20 5	20 5	4.5	12.0
Petersburg	20.5	23 5	4.5	14.0
Roanoke	20.5	23 5	4.5	14.0
Richmond	20.5	23 5	4 5	14.0
Ch'rist'n, W.Va.	20.0	23.0	4 0	13 0
Keyser	20 0	....	4 0	14 0
Parkersburg ...	17 0	20.0	4 0	14.0
Wheeling	20 0	23 0	4.0	14.0
Charlotte, N. C.	20 0	23 0	4.0	14 0
Hickory	20 0	23 0	4.0	14 0
Mt. Airy	20 0	23 0	4 0	14 0
Salisbury	20.0	23 0	4.0	14 0
Charl'stn, S. C.	20.0	23.0	5.0	14.0
Columbia	20.0	20.0	5.0	14.0

NEBRASKA

Standard Oil Co. (Nebraska)

	Gasoline Tank wag'n	Gasoline Service station	Gasoline Inclds tax of	Kero. Tank wag'n
Omaha	14.25	16 25	2 0	12 25
McCook	14 75	14 75	2 0	11 50
Norfolk	16 75	18.75	2 0	12 75
N. Platte	17 75	19 75	2.0	13.50
Scottsbluff	17.25	19.25	2.0	13.00

ROCKY MOUNTAIN DISTRICT

Continental Oil Co.

	Gasoline Tank wag'n	Gasoline Service station	Gasoline Inclds tax of	Kero. Tank wag'n
Denver, Colo. ..	18.0	20.0	2.0	14.5
Pueblo	17 0	17.0	2.0	14 5
Grand Junction	21 5	23.5	2.0	18.0
Casper, Wyo. .	18 0	20.0	3.0	13.0
Cheyenne	19.0	21.0	3.0	14.5
Butte, Mont. ..	22 0	22 0	3.0	19 0
Helena	22.5	24 5	3.0	19.0
Salt Lake, Utah	21.0	23 0	3.5	17.0
Boise, Idaho ..	23 5	25.5	4.0	19.0
Twin Falls	23.5	25 5	4.0	19.0
Albu'que, N. M.	21.0	24.0	5.0	17.0

TANK WAGON CHANGES

August 1—Standard Oil Co. of Louisiana reduced gasoline tank wagon and service station prices 1½ cents at Lake Charles, La.

August 2—Standard Oil Co. of Indiana reduced kerosene tank wagon price 2 cents at Quincy, Ill. Continental Oil Co. reduced gasoline tank wagon 1 cent and service station 3 cents at Pueblo, Colo.

August 3—Standard Oil Co. of Indiana reduced gasoline service station price 2 cents at Minneapolis, Minn.

August 4—Magnolia Petroleum reduced gasoline tank wagon and service station price 1 cent at Texarkana, Tex.

August 9—Standard Oil Co. of New York reduced gasoline tank wagon and service station price 2 cents in New York and New England except at points where schedules were below normal.

NORTH TEXAS MARKET GASOLINE IS WEAKER

WICHITA FALLS, Tex., Aug. 8.—Marked advances in natural gasolines and inquiries into export gasoline were the only bright features of the North Texas refined market during the week. Refined gasoline was considerably weaker and little was moved on the spot market. Fuels did not strengthen although one railroad took approximately 12,000 bbls. off the Wichita market early in the week.

Steady buying in the natural gasoline market gave those products a firmer tone and sent the prices up fractionally. A small lot of Grade AA was sold by a Fort Worth refiner for resale at 5½ cents. Some Gulf Coast refiners were in the market for large orders and several natural gasoline makers have booked good orders from those refiners. Throughout the territory natural gasolines have enjoyed a steady demand. Some expect the tide of good business in naturals to carry over another week.

The entrance the latter part of the week of an export buyer in the refined gasoline market stimulated interest in 64-66 390 and 64-66 375 gasolines but without increasing the price. Both grades were reported to have been quoted at 6¾ cents for export. There was little activity in the other grades of gasoline and few inquiries.

Price shading was reported to be common all over the territory. Only a few inquiries trickled in for U. S. Navy gasoline which is sluggish. Refiners were further disappointed when the week closed without inquiries for gasoline over August. While indications during the previous week dampened the hopes for business from that source, a small amount of August business was expected during the week just closed.

Although kerosenes started with liquidations improving, it was weaker on Monday. Its movement was less and inquiries were lighter. Fuel oil was not materially improved. One railroad was in the market and bought 12,000 bbls. at a reported price of 80 cents. Refiners are not getting the gas oil and distillate business anticipated and those two products are a little weaker. Buyers of cotton gin fuel were expected to be in the market more prominenly than they were.

Standard of Indiana Stock Issue Increase Meeting Next Month

CHICAGO, Aug. 8.—Regarding the proposed stock issue by the Standard Oil Co. of Indiana, President E. G. Seubert states that notices of a special meeting to be held on or about September 9, and requests for proxies will be mailed beginning today.

The local report is that stock will be increased from $250,000,000, of which $228,415,400 is outstanding to $375,000,000, and that the stock of the Pan American Eastern Co. is to be acquired through the proceeds of this issue.

CRUDE OIL PRICES

(Continued from Page 133)

EASTERN STATES

Joseph Seep Purchasing Agency
(Effective April 13)

Penna Grade Oil in New York Transit Line (New York)	$2.65
Bradford District Oil in National Transit Lines (Pennsylvania)	2.65
Penna Grade Oil in National Transit Lines (Pennsylvania)	2.55
Penna Grade Oil in Southwest Pennsylvania Lines (West Virginia)	2.55
Penna Grade Oil in Eureka Pipe Line lines (Pennsylvania)	2.50
Penna Grade Oil in Buckeye Pipe Line lines (Ohio)	2.35
Cabell Grade Oil in Eureka Pipe Line lines (West Virginia) March 16	1.40
Corning 35-cent grade oil in Buckeye Pipe Line Co.'s line (March 17)	1.35
Corning 25-cent grade oil in Buckeye Pipe Line Co.'s lines (March 17)	1.45
Somerset Oil in Cumberland Pipe Line lines (Kentucky) March 16	1.50
Ragland Grade Oil in Cumberland Pipe Line lines (Kentucky)	.95
Keister (Pennsylvania)	1.10

MIDDLE WESTERN STATES

Ohio Oil Co.
(Effective March 14)

Lima	$1.71
Wooster	1.57
**Saginaw, Mich., Saginaw Sand (May 27)	2.05
Illinois	1.60
Indiana	1.48
Princeton	1.60
Plymouth	1.33
Waterloo (Nov. 17, 1926)	1.35
*Western Kentucky	1.33
**Saginaw, Mich., Berea Sand (May 27)	1.95
†Cumberland, Barren, Clinton and Monroe Counties, Kentucky (March 16)	1.50
‡Oil in lines of Stoll Oil Refining Co. in Oil City, Ky. (March 16, 1927)	1.50
†Clay County, Tennessee (Nov. 18)	2.35
§Oil Springs (Canada)	2.18
§Petrolia (Canada)	2.11

*Posted by Ohio Oil Co.
†Posted by Paragon Development Co.
‡Posted by Stoll Oil Refining Co.
§Posted by Imperial Oil Co., Ltd.
**Posted by Sun Oil Co.

MEXICAN CRUDE

Note—Due to the fact that the exportation of Tuxpam light crude oil has become a negligible factor, prices will no longer be published.

*Panuco heavy (f.o.b. Mex. ports)	$1.15

*17.496c tax.

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Oil Securities Advanced During Week

Practically All Issues Participated in Movement. Seminole Agreement Appeared Basis for the Market

What appeared to be a real old-fashioned bull market in oil stocks developed during the past week when advances of two to fifteen points were recorded and practically no oil stocks were left out of the advance. Phillips Petroleum, about which "tips" to sell short had been circulated, ran up about five points in two days. All of the Standard Oil stocks were active and higher. One of the features of this group was Atlantic Refining, which hit 131. Ohio Oil was also well taken at a new high level.

The basis of the bull market seemed to have been the agreement to curtail Seminole oil output. At least the rise in oils started simultaneously with the announcement of that agreement as a coincidence; it also seemed to have started closely on the heels of the President's now famous "I do not choose to run" message.

The general opinion here seems to be that the oil situation is turning for the better and that within 60 days higher prices for crude oil will be in effect.

Barnsdall Corp.

Stockholders of the Barnsdall Corp. at a special meeting approved the plan to reclassify the capital stock. Under the plan of the Class A voting capital stock shall consist of $71,250,000, being 2,850,000 shares of $25 par value, made up of the present authorized 1,000,000 shares of Class A voting capital stock, together with 1,850,000 shares of authorized capital stock but heretofore classed as Class B nonvoting capital stock; the Class B nonvoting capital stock shall consist of $28,750,000, being 1,150,000 shares of $25 par value, instead of 3,000,000 shares as heretofore authorized. The plan provides for sufficient authorized but unissued stock to permit exchange of each share of outstanding Class B nonvoting stock for a share of Class A voting capital stock. The authorized but unissued Class B stock will be reduced by the same number of shares as now outstanding.

Owners of stock purchase warrants attached to Barnsdall 6 per cent debentures have the right to subscribe for Class A stock in place of Class B, or, if they have subscribed for Class B stock, to exchange such Class B, share for share, for Class A.

Julian Petroleum

So far as can be ascertained, Tide Water Associated Oil Co. holds no stock in the California Eastern Oil Co. The latter represents merged properties of the Julian Petroleum Corp. and six or seven subsidiary companies, including the Marine Oil Corp.

Owing to the failure of financing of the California Eastern merger, these companies are being operated as separate entities, H. L. Carnahan, receiver, explained, until a plan, already proposed, can be worked out and properly financed.

At the time of the Marine sale to Julian Petroleum Corp., Associated Oil Co. owned 30 per cent of Marine Oil Corp.'s 3,750,000 shares. All the Marine stock was transferred, the bulk of it on a cash basis, although a few stockholders accepted part cash and part stock in the new California Eastern in accordance with the stock transfer plan. Associated's 30 per cent interest was transferred on a cash basis. Tide Water Associated, which later acquired Associated Oil, took some of what the receivers term the $2,630,000 Lundy notes secured by deed of trust to Anglo-California Trust Co. of San Francisco, trustee.

The State Corporation Commissioner announced that all Julian Petroleum Corp. stock must be cleared of over-issue stigma before it can be replaced on the market. Commenting on this statement, Mr. Carnahan said the receivers long ago had conceded this point, which is included in the present reconstruction plan.

The proposal is that the over-issue stock be accepted on a "dollar-invested" plan, instead of par value. In this manner it is believed that innocent purchasers of over-issue stock will be protected, as well as regular stockholders. An order has already been issued by the Federal Court requesting all stockholders to register their securities with the receivers before September 12.

Louisiana Oil

The Louisiana Oil Refining Corp. and subsidiaries report for the six months ended June 30, 1927, consolidated net profit of $261,563 after depreciation, depletion, amortization and Federal taxes, equivalent after allowing for 6½ per cent preferred dividend requirements, to 11 cents a share earned on 1,140,063 no par shares of common stock. This compares with profit of $1,103,639 before Federal taxes in the first half of 1926.

The net loss for the June quarter was $33,332 after charges and Federal taxes, comparing with net profit of $294,896 or 20 cents a share, on the common in the preceding quarter, and profit of $841,154 before Federal taxes in the second quarter of the previous year.

Mid-Continent Petroleum

The Mid-Continent Petroleum Corp. and subsidiaries report for the six months ended June 30, 1927, profit of $4,884,955 after interest, abandoned wells, etc., but before depreciation, depletion, and Federal taxes. This compares with profit of $6,816,884 in the six months ended June 30, 1926. Outstanding stock consists of 64,345 shares of preferred and 1,357,461 no par shares of common.

The profit for the June quarter was $2,004,105 before depreciation, depletion and Federal taxes, comparing with profit of $2,880,850 in the preceding quarter and profit of $3,962,624 in the second quarter of the previous year.

The consolidated income account for the six months ended June 30, 1927, compares as follows:

	1927	1926
Operating profit	$5,614,086	$7,609,834
Leases and aband. wells	328,434	328,894
Interest	400,697	464,056
*Profit	$4,884,955	$6,816,884
Prfd. dividends	225,213	226,853
Common dividends	2,034,919	.....
Surplus	$2,624,823	$6,590,031
For Quarter Ended June 30		
Operating profit	$2,310,978	$4,345,552
Leases and aband. wells	109,607	150,554
Interest	197,266	232,374
*Profit	$2,004,105	$3,962,624

*Before depreciation, depletion and Federal taxes.

Middle States Oil

Robert Wilson Jackson has addressed a letter to stockholders of the Middle States Oil Co. who have deposited their stock with the stockholders' protective committee, in which he states that a plan for reorganization will soon be made public. He also states that the new plan "will admit no assessment of any kind against the stockholders."

Dividends

Imperial Oil, Ltd., has declared an extra dividend of 12½ cents a share in addition to the regular quarterly dividend of 25 cents, both payable September 1 to stockholders of record August 15. This is the same as in the preceding quarter.

The Mid-Continent Petroleum Corp. has declared the regular quarterly dividend of $1.75 a share on the preferred stock, payable September 1 to stockholders of record August 15.

The Standard Oil Co. of Indiana has declared the usual extra dividends of 25 cents a share and regular quarterly dividend of 62½ cents a share, both payable September 15 to stockholders of record August 16.

The Tide Water Associated Oil Co. has declared the regular quarterly dividend of $1.50 a share on the preferred stock, payable October 1 to stockholders of record September 9.

The Associated Oil Co. has declared the regular quarterly dividend of 50 cents a share, payable September 24 to stockholders of record August 31. The extra dividend of 40 cents a share, declared in the five preceding quarters, was omitted.

The Standard Oil Co. of California has declared regular dividend No. 6, of 62½ cents a share, payable on September 15, 1927.

Panhandle Producers & Refiners

The consolidated report of earnings of the Panhandle Producing & Refining Co. and its subsidiaries for the quarter ended June 30, 1927, follows:

Operating revenues	$1,426,517.33
Operating expenses	1,241,890.21
	184,627.12
Administrative, selling and taxes	67,330.08
	117,297.04
Other income	4,406.87
	121,703.91
Deductions from income	29,978.72
Net income before providing for depreciation and depletion	91,725.19
Less: Depreciation and depletion added to reserves	230,995.47
Net income—deficit	139,270.28
Accrued cumulative dividends on preferred stock	56,154.00
Net to surplus—deficit	$ 195,424.28

Car Companies Merge

Merger of the General American Tank Car Corp. and the Pressed Steel Car Co. has been announced in a statement from Max Epstein, president of the first-named organization, in which George J. Whelan who, with associates, owns a controlling interest in the common stock of the Pressed Steel Car Co., concurred. The agreement is subject to the approval of the management and stockholders of the Pressed Steel Car Co.

The present plan is to form a holding company. The General American Tank Car Corp. is stated to be the largest manufacturer in the world of tank cars and in addition manufactures all kinds of railroad freight-carrying equipment. It is state to have approximately 10,000 cars on lease.

The Pressed Steel Car Co. owns or controls 24 companies, chief of which is the Keppel Industrial Car & Equipment Co. These companies manufacture all classes of car railroad equipment.

The annual statement of the Pressed Steel Car Co. showed assets appraised at $56,000,000. The capitalization consisted of $12,500,000 common stock, $15,000,000 preferred stock and $7,000,000 funded debt. The statement of the General American Tank Car Corp. listed assets of $37,600,000, with $8,103,700 preferred stock outstanding and a combined common stock and surplus liability of $14,838,335. Its funded debt consisted of $10,434,000 in car equipment notes.

NEW YORK STOCK EXCHANGE—LIST OF ACTIVE STOCKS

Stocks—	Par	Clos. Quot. Aug. 8	Aug. 1	1927 High	1927 Low	1926 High	1926 Low	1925 High	1925 Low
Amerada Corp.	..	30¼	29⅝	37⅝	27⅝	32⅞	24⅝	..	..
Atlantic Refining, com.	100	125	121	128⅝	107	128⅜	97	117½	95½
Barnsdall "A"	25	24⅜	24¼	35½	22⅝	32½	23½	33½	18⅜
California Petroleum, com.	25	24⅞	23⅜	32⅞	21½	38⅛	30⅞	34⅜	23⅜
Houston Oil	100	141¼	157⅝	173¼	60½	75	50¼	85	59
Independent Oil & Gas	..	21½	20	32⅜	17⅝	34	20¼	41⅜	13½
Louisiana Oil	10	11⅝	11⅞	18¼	11½	19⅝	12	23⅜	13⅜
Maracaibo	..	*13	13½	22⅜	15	27⅜	18⅜	35½	20⅜
Marland	..	35½	33½	58⅜	31	63⅜	49¼	60⅛	32⅜
Mid-Continent Petroleum	..	31	30½	39⅝	29	41	25⅝	38	26⅜
National Supply	50	86	89⅜	95¾	76	84⅝	55½	71	54⅜
Oil Well Supply	25	35½	35⅝	44⅜	31¼	36	30	38	33⅜
Pan American, B	50	56	54⅜	66⅝	54	72⅜	56½	83⅞	59½
Pan American, Western B	..	23½	20	37⅞	19	46	34	94⅜	37¼
Phillips Petroleum	..	43⅜	41⅞	60¼	38¼	54⅞	42½	47⅛	36¼
Producers & Refiners	50	23¾	23⅝	33⅞	16⅜	26	11	32⅝	12½
Pure Oil, com.	..	27⅜	27⅛	33½	26	31	25⅜	33¾	25½
Royal Dutch, N. Y., sh.	13.40	*45½	45⅜	54⅛	48½	57⅜	49⅜	57⅜	48¼
Shell Transport	10	43⅝	*43⅛	49	43⅝	48⅞	42	49	39⅜
Shell Union, com.	..	27⅜	27⅛	31⅜	25⅜	30⅞	24	28⅜	21⅝
Simms Petroleum	10	15	14⅜	22⅜	14½	25⅝	16½	28½	18⅜
Sinclair Consolidated	..	17	16¼	22⅜	16¼	24⅞	16⅜	24⅞	17
Skelly Oil	25	26⅞	26½	37⅜	24¼	37½	27	32½	21⅜
Standard of California	25	55⅝	53⅝	60⅜	50⅜	63½	54	67¼	52½
Standard of New Jersey, com.	25	38¼	37¼	41⅜	35⅛	46⅜	37½	47½	38⅜
Standard of New York	25	31¼	30½	34½	29⅞	47¼	30⅝	48⅝	40
Sun Oil Co.	..	32	32	34⅞	30	41⅝	30½	43⅞	38½
The Texas Company	25	48⅜	48¼	58	45	58	48	55	43¾
Texas Pacific Coal & Oil	10	14¼	14	18⅞	12	19½	12⅛	23⅜	11
Tide Water Associated Oil	..	17⅝	17⅞	23½	15½	21	17	..	..
Transcontinental	..	8¼	9⅛	8⅜	3⅜	5½	3	5⅝	3½
Union Oil of California	25	44⅜	42¼	56½	39⅝	53⅜	37¼	43⅝	33½
Union Tank, com.	100	114	*115	116	95	120⅜	84½	‡134	118
White Eagle Oil & Refining	..	*22⅝	22⅞	27½	22	29⅜	25⅛	21¾	25⅝
Standard Oils									
Anglo-American Oil	£1	19¼	*18	21⅝	18⅜	19⅜	16½	26⅜	17½
Borne Scrymser	25	60⅜	*55	65	49½	75	65	‡240	205
Buckeye Pipe Line	50	*54½	*55½	58	45	59⅛	42	72	63½
Chesebrough Manufacturing Co.	25	110	*108	107	76½	81¼	63	74	98¼
Continental	10	17	16⅜	22⅝	16⅜	25⅞	19½	21½	21⅞
Cumberland Pipe Line	100	*89	*89	‡137	90¼	137	102	156	128
Eureka Pipe Line	100	*53½	*53	56¼	47	53⅜	43	96	61¼
Galena Signal, com.	100	*8	*7	13½	7½	32½	9⅞	68½	23½
Humble Oil & Refining Co.	25	62½	58⅜	62⅜	54	99⅝	52	99	42½
Illinois Pipe Line	100	147½	*145	150	123⅜	144	131	154½	124
Imperial Oil	..	47½	*45	47	37⅜	39¾	32½	39¼	27¼
Indiana Pipe Line	50	68	*67½	72½	61	68	52¼	84	87½
International Petroleum Co.	10	31¼	29	34⅞	28½	35¼	28⅜	25⅜	22⅜
National Transit Co.	12.50	*15⅝	15½	17½	13⅜	30¾	27¼	25½	16½
New York Transit	100	33¼	*33½	36	31¾	51½	27¼	70	50
Northern Pipe Line	100	*81	*81	88	70	80½	64	88	67½
Ohio Oil Co.	25	61½	58¾	64¼	52	67⅝	55⅜	75¼	60
Penn-Mex Fuel	25	*24	*26	31	12	24¼	15	44	19
Prairie Oil & Gas	25	49⅞	48½	55½	45⅝	60¼	48	65½	45⅞
Prairie Pipe Line	100	180	181	185	132	137½	122½	129¾	105
Solar Refining Co.	100	*165	*177	‡201½	178	212	184½	159	200
South Penn Oil	25	*37	*35¾	36	31⅜	50	35	‡197	129
Southwest Pa. Pipe Line	100	*70	*70	77	55⅛	56	47½	84	50
Southern Pipe Line	50	*17	*17	‡27¼	24	27	24	‡103	63
Standard of Indiana	25	73⅝	69⅝	74¼	64¼	70½	60½	70¾	69¼
Standard of Kansas	25	17¼	16½	20⅞	15⅝	36½	16½	46	30¼
Standard of Kentucky	25	122½	121	122½	111⅝	134⅜	108	137	114⅜
Standard of Nebraska	25	45	44	49½	45	51⅛	42	‡270	231
Standard of Ohio, com.	100	80½	75¼	‡354	294	362	192½	369	338
Swan & Finch, com.	25	*16½	*17	17	15	21	18	27	12
Vacuum Oil	25	126½	129¼	134	95½	109⅜	94½	109½	80½
Miscellaneous									
Gulf Oil Corp. of Pa.	25	91⅛	90⅝	96⅛	86¼	95	82½	98¾	63½

*Bid, no sales. ‡Old stock. †New stock.

Quotations furnished by W. J. Wollman & Co.

The Oil and Gas Journal's weekly average price of 20 representative petroleum stocks listed on the New York Stock Exchange was as follows:

Aug. 8	61.33	July 2	58.99	May 28	58.68
Aug. 1	60.38	June 27	58.99	May 23	57.89
July 25	60.55	June 20	60.46	May 16	58.10
July 18	60.36	June 13	59.91	May 9	58.08
July 11	59.36	June 6	59.27	May 2	57.13

TANK WAGON AUGUST 1 UP SLIGHTLY

(Continued from Page 130)

ential will tend to become less from now on, not only because of the slight advances now, but because the average tank wagon price declined rapidly from August 1 of last year over the balance of the year. At the present rate of consumption and at the present price differential the oil companies are losing in gross revenue about $1,850,000 daily on gasoline alone compared to a year ago.

Included in the tax changes, Iowa increased from 2 cents to 3 cents on July 4, California from 2 cents to 3 cents on July 29, and Illinois placed a 2-cent tax in effect on August 1. These tax changes will add approximately $3,000,000 annually to the state revenue of Iowa, $10,000,000 to California and $14,000,000 to Illinois.

GASOLINE PRICES EFFECTIVE AUGUST 1, 1927

Table showing gasoline tank wagon prices as of August 1, 1927, exclusive of taxes, in 50 representative cities, including the amount and the date of changes since July 1, 1927. High and low prices and state tax also given.

	Prices July 1	July changes	Prices Aug. 1	High and Low —1926— High	1926 Low	—1925— High	1925 Low	Tax Aug. 1, 1927
Birmingham, Ala.	14.0	....	14.0	20.0	16.0	20.0	13.0	4.0
Phoenix, Ariz.	19.0	....	19.0	22.0	19.0	20.0	18.0	3.0
Little Rock, Ark.	13.0	....	13.0	18.0	14.0	19.0	12.0	5.0
San Francisco, Calif.	14.0	....	14.0	16.0	13.0	15.0	13.0	3.0
Denver, Colo.	16.0	....	16.0	20.0	16.0	20.0	12.0	3.0
Hartford, Conn.	19.0	....	19.0	21.0	17.0	21.0	15.0	2.0
Dover, Del.	16.0	....	16.0	20.0	17.0	21.0	15.0	3.0
Jacksonville, Fla.	13.0	....	13.0	19.0	12.0	19.0	12.0	5.0
*Atlanta, Ga.	14.0	....	14.0	21.0	14.0	21.0	14.0	3.5
Boise, Idaho	19.5	....	19.5	24.0	20.0	21.5	15.0	4.0
Peoria, Ill.	13.2	16 9.0	9.0	19.2	10.5	19.2	10.5	2.0
Chicago, Ill.	14.0	....	14.0	18.0	15.0	18.0	13.0	2.0
Indianapolis, Ind.	13.2	....	13.2	19.2	16.2	19.2	13.2	3.0
Des Moines, Iowa	13.0	....	13.0	19.5	16.0	19.5	13.5	3.0
Wichita, Kans.	11.8	....	11.8	16.8	14.8	18.8	8.8	2.0
Louisville, Ky.	14.0	....	14.0	20.0	17.0	19.0	12.0	5.0
New Orleans, La.	12.5	....	12.5	17.5	13.5	18.5	11.5	†3.0
Augusta, Me.	19.0	....	19.0	21.0	17.0	22.0	15.0	3.0
Baltimore, Md.	16.0	....	16.0	19.0	15.0	19.0	13.0	4.0
Springfield, Mass.	17.0	....	17.0	21.0	17.0	21.0	15.0	...
Detroit, Mich.	13.8	....	13.8	19.8	16.8	19.8	13.8	2.0
Duluth, Minn.	12.5	....	12.5	20.5	15.5	20.5	13.5	2.0
Natchez, Miss.	12.5	....	12.5	18.5	15.5	18.5	11.5	4.0
Kansas City, Mo.	10.9	....	10.9	18.9	15.9	18.9	12.9	†3.0
Helena, Mont.	19.5	....	19.5	24.0	21.0	24.0	18.0	3.0
Omaha, Neb.	12.25	....	12.25	19.25	14.25	19.25	10.0	2.0
Reno, Nev.	18.0	....	18.0	19.5	16.5	18.5	16.5	4.0
Newark, N. J.	18.0	....	18.0	19.0	15.0	19.0	13.5	2.0
Albuquerque, N. Mex.	16.0	....	16.0	26.5	20.0	23.5	19.5	5.0
New York, N. Y.	19.0	....	19.0	21.0	17.0	22.0	15.0	...
Charlotte, N. C.	16.0	....	16.0	19.5	15.5	20.0	12.0	4.0
Fargo, N. D.	14.0	....	14.0	21.0	18.9	20.9	14.9	2.0
Cleveland, Ohio	16.0	....	16.0	20.0	16.0	18.5	15.0	3.0
Tulsa, Okla.	11.0	21 12.0	12.0	17.0	13.0	18.0	9.5	3.0
Portland, Ore.	14.5	....	14.5	16.0	13.0	15.0	13.0	3.0
Philadelphia, Pa.	12.0	14 14.0	14.0	20.0	17.0	21.0	15.0	‡3.0
Providence, R. I.	17.0	....	17.0	21.0	17.0	22.0	15.0	2.0
Charleston, S. C.	15.0	....	15.0	19.5	15.0	20.5	12.5	5.0
Huron, S. D.	11.5	14 14.5	14.5	20.5	14.0	20.0	13.0	4.0
Memphis, Tenn.	12.0	....	12.0	18.5	13.5	18.5	10.5	3.0
Dallas, Tex.	12.0	....	12.0	17.0	13.0	18.0	10.0	3.0
Salt Lake City, Utah	17.5	....	17.5	22.5	18.5	21.5	17.5	3.5
Burlington, Vt.	19.0	....	19.0	21.0	18.0	22.0	15.0	2.0
Norfolk, Va.	16.0	....	16.0	19.0	15.0	20.0	14.5	4.5
Washington, D. C.	16.0	....	16.0	19.0	15.0	19.0	14.0	2.0
Charleston, W. Va.	16.0	....	16.0	19.0	15.0	19.0	14.0	4.0
Milwaukee, Wis.	13.1	....	13.1	19.1	16.1	19.1	13.1	2.0
Casper, Wyo.	15.0	....	15.0	20.0	17.0	20.0	15.0	3.0
Seattle, Wash.	14.5	....	14.5	16.0	13.0	15.0	13.0	2.0
Minneapolis, Minn.	11.0	....	11.0	20.2	15.2	20.2	13.2	2.0
Average price	14.86	....	14.89	19.717	15.713	19.647	13.629	3.00

*Does not include one-half cent inspection fee. †State tax 2 cents, remainder city tax. ‡Tax paid by retail dealer.

UNIVERSAL FILES ADDITIONAL SUITS

(Continued from Page 130)

ing petroleum; No. 1,517,830, the single claim issued December 2, 1924, on carbonaceous fuel to Gustav Egloff and Harry P. Benner; No. 1,525,281, claims 2 to 13, inclusive, February 3, 1925, method of treating petroleum, on invention of Carbon P. Dubbs; No. 1,546,634, claims 1 to 4, issued July 21, 1925, on invention of Carbon P. Dubbs; No. 1,522,425, all claims, issued January 6, 1925, on invention of Carbon P. Dubbs; No. 1,550,607, claims 1 to 3, granted August 18, 1925, invention of Carbon P. Dubbs; No. 1,568,400, all claims, issued January 5, 1926, invention of Carbon P. Dubbs for apparatus for cracking oils; No. 1,550,568, claims 1 to 3, issued August 18, 1925, on invention of Robert T. Pollock; No. 1,592,560, all claims, issued July 13, 1926, on invention of Carbon P. Dubbs.

STABILIZER PATENTS INVALID, COURT HOLDS

(Continued from Page 131)

patents in the operation of its manufacturing processes but upheld the defendants in their prior art claims.

The decision involves some interesting conclusions, not only regarding the three patents directly involved, but also other patents. In the first part of his decision Judge Hutcheson reviews the claims by both the plaintiff and defendant with comments regarding the relative significance of certain early-day discoveries which were pertinent in the present case.

Court's Conclusions

In concluding his decision, the court held as follows:

"Much of the trial was devoted to a discussion of the constituents of gas, the processes of rectification and distillation; the difficulty or ease of making a sharp separation in various stated instances; but when the testimony was through I think the case came down after allowing due weight to all these matters, to the simple proposition that here is a case of rectification, pure and simple, where the ingredient which De Brey calls worthless is represented in Thompson's patent by propane; the product which De Brey calls valuable is represented in Thompson by the normal constituents of natural gasoline, pentane and higher and more or less butane.

"In short, the case which to a non-technical man like myself looking on appeared in the statement of it profoundly complex, at the end of it, to the same nontechnical man, thanks to the ability and candor of the technical witnesses, appears profoundly simple.

"Upon the case as made I have no difficulty in agreeing in the main with the defendant, and while on account of the undoubted value of rectification to the industry I have had some difficulty in rejecting entirely the process claims, and have struggled unavailingly to find some limiting statement in them which will give plaintiff some, though narrow, protection, the product claims have from the beginning seemed to me, and still do seem, fundamentally nonpatentable, and I am at a loss to know how the Patent Office could have granted a patent for natural gasoline as a new product, merely because, for instance, as one of the claims shows, the patented gasoline contains more butane than petroleum gasoline; or how the patent office could have granted a patent for a natural gasoline merely because it contained more butane than some others might have contained.

No New Product

"Nothing is disclosed at best for the patents in this product but a difference of degree between the constituents of it and all prior products. There is no new product whatever created. There is merely a sharp separation of the chemical constituents of the gas and a sharp discarding of some of them. This is nothing more than doing the same thing in a better and more exact way than by weathering, and in accordance with the well-known and established principles of rectification known for many years in this and kindred arts.

"Besides, I agree with defendant that substantially this product has been, can be and will be made again by weathering, and if by weathering gasoline has been produced with a substantial quantity of butane in it, it is no more a new invention to produce gasoline with 25 per cent butane as against 10 or 18 per cent before, than to produce a saltine solution of 15 per cent following a common practice of 10 per cent.

"In addition, I think it clear that the product claims of Thompson are anticipated by the disclosures of both De Brey and Thompson, and are but the necessary result of those disclosures if a good rectification is employed with a definite object in view, and certainly it could not be successfully contended that the owner of a patent for a process could be deprived of the right to employ the process by a later patent taken out for the product of that process.

"In what I have said about the product claims I would not be understood as belittling plaintiff's position.

"So earnest has been its insistence and so ably has its side been maintained that I would be wanting both in good manners and in good sense if what I have said has given the impression that these claims have been disposed of cavalierly.

Thompson Patents

"It has seemed to me from the very beginning, and increasingly so as I have studied the record in the light of the briefs, that plaintiff has added greatly to the burdens assumed by it when it had to sustain the De Brey process claims without invalidating the Thompson process claims, when it undertook to carry the matter still further, and in the product claims press for a monopoly upon natural gas gasoline merely on the ground of the complete exclusion from it of one of its most volatile constituents, and the inclusion in it of a considerable quantity of that next in volatility.

"As to the process claims plaintiff has found itself in a position of great difficulty. Most of De Brey is so broad as to be clearly anticipated, while at the same time it carries sufficient disclosure with sufficient definiteness directed to the material and the art with which Thompson patents concern themselves to operate to destroy him, and I think that the greater part of the difficulty in this case, both in its development and in the evidence, and its presentation to me, has sprung out of the fact that the three patents overlap each other, and cover in many respects, substantially the same ground.

"Turning specifically to the consideration of the process claims of De Brey I agree with defendant that all of them except No. 3 are so broad in their claims as to seek to cover the rectification of hydrocarbons generally, and are anticipated in the various patents in suit covering rectification. That claim No. 3 is less broad than the other claims in that it is limited to natural gas gasoline, but that he does not suggest any particular or new method of rectification which involves invention; that he merely suggests applying good rectification to the natural gasoline industry. That such a suggestion is not patentable, because anticipated generally by the prior art, and specifically by Schill and Weidich. That the only thing he did was to suggest what was obvious to any mechanic and any chemist, that the application of rectification to the hydrocarbons found in natural gasoline would produce the sharp separation desired to increase the quantity of gasoline within the range of permitted volatility and therefore all the art, and Schill and Woidich in the gasoline art, had anticipated him.

"I also agree with them that the process claims of the first Thompson are anticipated not only by De Brey, but by Schill and Woidich, Snelling and other citations in the prior art."

NORTH AND WEST TEXAS

(Continued from Page 39)

feet. Same company's No. 103-A University is flowing 100 bbls. daily at 2,890 to 2,917 feet. Big Lake Oil Co.'s No. 112 University is a 15-bbl. pumper at 2,889 to 2,900 feet. No. 119 University is a 150-bbl. pumper at 2,950-83 feet. Big Lake Oil Co.'s No. 122 University flowed 981 bbls. initial at 2,990 to 3,021 feet. Texon Oil & Land Co.'s No. 9-A, Group 1 University, made 460 bbls. initial at 2,893 to 2,901 feet. Texon company's No. 6-A Group 2 University is a 40-bbl. pumper at 3,225-50 feet.

Scurry County

Northwestern Oil Co.'s No. 1 T. C. Stinson was plugged back from 4,524 feet to 1,805 feet and shot with 90 quarts at 1,745 to 1,805 feet and made 43 bbls. of oil and 5 bbls. of salt water initial. The third day's gauge showed production of 20 bbls. of oil and 1 bbl. of salt water.

Tom Green County

H. D. Camp and associates' No. 1 Wilkey was dry and abandoned at 1,003 feet.

Upton County

Roxana Petroleum Corp.'s No. 23 Bowen pumped 270 bbls. of oil and 2

bbls. of sulphur water at 2,086 to 2,111 feet.

NORTH CENTRAL TEXAS
Estimated Production Week Ending August 6, 1927

Ranger District—	July 30	Aug. 6
Brown County	19,430	19,385
Callahan County	4,800	4,685
Coleman County	910	940
Comanache County	1,625	1,635
Palo Pinto County	545	550
Ranger	9,670	9,380
Shackelford County	6,095	6,225
Sephens County	9,980	9,905
Total, Ranger district	53,055	52,705
Wichita Falls District—		
Archer County	26,120	25,995
Baylor County	85	80
Clay County	640	615
Cooke County	5,205	5,905
Foard County	55	*
Jack County	690	840
Montague County	11,490	11,365
Throckmorton County	1,820	1,820
Wichita County	30,680	30,575
Wilbarger County	12,475	12,365
Young County	12,115	13,170
Total Wichita Falls Dist.	101,375	102,730
Total North Texas	154,430	155,435
West Texas—		
Big Lake Field	24,860	25,117
Crane County	76,512	78,777
Crockett County	1,505	1,525
Ector County	15	**
Garza County	8	8
Glasscock County	34	32
Howard County	3,184	3,226
Jones County	1,701	1,653
Loving County	20	20
Mitchell County	3,842	3,842
Pecos County	4,598	5,475
Scurry County	25	25
Upton County	22,241	20,403
Winkler County	1,214	1,722
Total West Texas	139,759	141,825
Grand total	294,189	297,260
Increase		3,071

*Foard County's only oil well, Roxana Petroleum Corp. and Fain-McGaha's No. 1 Mathews, is off production, drilling deeper.
**Ector County's one well shut down, storage full.

WEST TEXAS

Daily Average Production for Week Ending August 6, 1927

Crane County
Church-Fields Pool & McElroy

Company, Lease—	Wells	Bbls.
Church et al:		
University	1	107
Church & Weekley:		
University	3	2,628
Church & Fields:		
Duoll-University	1	122
Pecos Oil Co.:		
University	7	4,383
Eastland Oil Co. & Collett:		
University	6	9,953
Gulf Prod. Co.:		
All leases	36	15,366
Humble O. & R. Co.:		
University	10	7,441
Independent:		
University-A	2	1,088
University-B	1	427
Landreth Prod. Corp.:		
Cowden-Anderson	8	6,010
Magnolia Pet. Co.:		
University-Hardwicke	4	1,282
University-O'Keefe	8	330
State-Lasseter	2	61
Magnolia et al:		
University	4	155
Prairie Oil & Gas Co.:		
University	6	0
State-Lasseter	2	1,992
Simms & Atlantic:		
University-A	8	7,487
University-B	1	70
University-C	6	11,617
University-D	2	1,132
University-E	1	454
Stidham & Thrasher:		
University	1	12
The Texas Company:		
University	1	275
Tidal Oil Co.:		
University-B	2	101
University-C	1	37
University-E	1	64
University-F	6	4,529
University-H	2	64
University-L	1	257
Total, Church-Fields-McElroy	134	77,444

Miscellaneous Crane County

Independent:		
Hughes	1	8
McMan O. & G. Co.:		
Hughes	2	80
Marland Oil Co.:		
All leases	16	956
The Texas Company:		
King	9	287
Union Land-F	1	2
Grand total, Crane County	163	78,777
Average per well		483

Crockett County

Cromwell et al:		
Powell	3	130
Gulf Prod. Co.:		
Powell	5	139
J. K. Hughes Dev. Co.:		
Powell	4	210
Humble & Marland:		
Powell	9	280
Humble O. & R. Co.:		
Sorg	1	5
Powell-B	1	30
Republic Prod. Co.:		
Powell	2	177
Roxana Pet. Corp.:		
Powell	1	15
P. H. Williams:		
Powell	1	539
Total	27	1,525
Average per well		56

Ector County

J. S. Cosden, Inc.:		
Connell-A	1	*

*Shut down for past week because storage full.

Garza County

Emerald Oil Co.:		
J. M. Boren	1	8

Glasscock County

Texon & Marland:		
Settles	1	32

Howard County

Bristow & Merrick:		
A. J. Hooks	3	115
Comet Pet. Co.:		
H. R. Clay	2	20
Dixie Oil Co.:		
H. R. Clay	1	9
F. H. E. Oil Co.:		
John Roberts	1	60
Godley Oil Co.:		
A. J. Hooks	1	25
Gulf Prod. Co.:		
Chalk	1	26
Humble O. & R. Co.:		
Douthit	2	35
Lockhart & Co.:		
Chalk & Scott	7	105
Magnolia Pet. Co.:		
All leases	30	963
Marland Oil Co.:		
All leases	33	1,333
Midwest Exp. Co.:		
H. R. Clay	2	35
Owens & Sloan:		
John Roberts	1	30
Pure Oil Co.:		
Otis Chalk	4	285
Reeves & Apperman:		
H. R. Clay	2	145
Tidal Oil Co.:		
Otis Chalk	2	40
Total	92	3,226
Average per well		35

Jones County

Atlantic O. P. Co.:		
Howell	1	0
Marland Oil Co.:		
Mason	3	386
Midwest Exp. Co.:		
Thornton	4	235
Phillips Pet. Co.:		
Tessie-Walling	4	326
Joe Winter	3	314
R. M. Beasley	1	79
J. C. Mason	1	179
H. B. Vestal	1	119
Stebbins Oil Co.:		
Higgs	1	15
Totals	19	1,653
Average per well		87

Loving County

Lockhart & Co., Allen	1	20

Mitchell County

Atlantic O. P. Co.:		
Womack	8	125
California Co.:		
All leases	92	2,768
F. J. Carey, E. Morrison	1	14
Eastland Oil Co.:		
All leases	9	263
Magnolia Pet. Co.:		
All leases	22	644
Tidal Oil Co.:		
Boh leases	2	28
Total	134	3,842
Average per well		28

Pecos County

Allsman & Bell:		
River Bed	1	162
California Co.:		
Yates 1	1	780
Mid-Kansas & Transcontinental:		
Smith-Taylor	1	701
Yates-A	5	2,177
Yates-B	2	1,177
Yates-C	1	478
Texon O. & L. Co.:		
Yates	1	0
Total	12	5,475
Average per well		456

(All wells, except River Bed, on one-quarter and three-eighths inch choke.

Reagan County

Big Lake Oil Co.:		
University	111	18,862
Texon O. & L. Co.:		
University	78	6,255
Total	189	25,117
Average per well		133

Scurry County

Northwest Oil Co.:		
All leases	4	25

Upton County

Amerada Pet. Corp.:		
Hughes	5	377
Atlantic O. P. Co.:		
Sherk	1	35
Bryant & Atlantic:		
Baker	2	70
Dixie Oil Co.:		
Burleson	23	2,912
Hughes	10	219
Gulf Prod. Co.:		
All leases	14	3,990
Humble O. & R. Co.:		
Burleson	4	34
Ricker	4	823
Independent:		
Burleson, Taylor & Wooley	26	1,197
McMan O. & G. Co.:		
Baker	2	35
Marland Oil Co.:		
All leases	80	2,698
Prairie O. & G. Co.:		
J. T. Lane	4	778
Allie Lane	2	323
Republic Prod. Co.:		
Baker	6	125
Roxana Pet. Corp.:		
Bowen	20	2,558
Estep	3	50
Hughes	10	313
Simms Oil Co.:		
Shirley	3	100
Snowden & McSweeney:		
Hughes	1	175
Sun Oil Co.:		
Burleson & Baker	10	245
The Texas Company:		
Burleson	4	45
King	12	416
Perry	1	60
Texon O. & L. Co.:		
Sherk	1	20
Tidal Oil Co.:		
Hughes	1	89
Burleson	1	19
Texas Pacific C. & O. Co.:		
Sherk	4	110
Lane-A	9	2,606
Lane-B	1	22
Wentz Oil Corp.:		
Sherk	3	129
White Eagle O. & R. Co.:		
Hughes	1	15
Total	268	20,403
Average per well		72

Winkler County

Independent O. & G. Co.:		
Hendricks	1	75
Southern Crude:		
Hendricks-T-67-A	1	56
Hendricks-T-88-C	2	604
Hendricks-T-88-A	1	572
Gulf Prod. Co.:		
Hendricks	1	415
Total	6	1,722
Average per well		287
Grand total West Texas	918	141,825
Average per well		154.5

HENDRICKS POOL IS ALREADY A BIG FIELD

(Continued from Page 92)

being done with rotaries, which are usually standardized after cementing the 8-inch pipe.

It is interesting to reflect upon the amount of development which this part of west Texas has undergone within the past year. It was just a year ago the middle of July when Roy A. Westbrook and associates shocked a skeptical world by encountering some free oil at 2,525 feet in their No. 1 Hendricks shortly after the Gulf Production Co. obtained a small well on its McElroy block. The Church-Fields Pool at that time had a few small wells which didn't amount to much and many good oil men believed the old adage, "No oil or law west of the Pecos."

The first wells in this region were started for the most part blindly so far as any geological evidence was concerned. They were located more with reference to "yardstick geology" and the location of drilling blocks than anything else. But the recent developments are based on subsurface geology and every well that is drilled adds its quota to the meager volume of data on which new fields are to be located.

Late Fields

(Continued from Page 39)

County, Colorado, has 3,000,000 feet of gas from unidentified sand at 3,535-65 feet. This is one of three tests drilling to horizons beneath the big gas horizon at around 3,000 feet. The objective is the Sundance. Miley Exploration Co.'s No. 1 Hutchinson, Section 30-33-12, La Plata County, Colorado, encountered salt water in the Dakota sand at 3,653 feet and drilling has been suspended, six tests by various companies in that area having failed to develop commercial production.

NEW MEXICO

DENVER, Colo., Aug. 9.—Midwest Refining Co.'s No. 34, SE SW Section 36-18-9, Hospah Dome, McKinley County, cut a sand in the base of Mesa Verde at 1,602 to 1,612 feet, estimated good for 50 bbls. The location is about three-quarters of a mile southeast of No. 1 Hancock, the discovery well, which tested 224 bbls. in 24-hour test from the same horizon last February.

Texas Production Co.s No. 1 Robinson, Section 25-16-31, Eddy County, gauged 80,000,000 feet of gas in a test by the Phillips Petroleum Co., from total depth of 3,885 feet. With tools in the hole the well sprayed 15 to 25 bbls. of oil with gas but the test showed no increase.

CALIFORNIA

LOS ANGELES, Calif., Aug. 9.—Milham Exploration Co.'s No. 1 near Buttonwillow in Kern County, came in a 10,000,000-foot gasser with no oil. An attempt will be made to develop a gas field and it will be kept flowing for one month's test. Standard's No. 14 San Gabriel, Seal Beach, a 60,000,000-foot gasser, blew three days and is now sanded up. It is the largest gasser finished in southern California in the past two years.

LOUISIANA

SHREVEPORT, La., Aug. 9.—Dixie Oil Co.'s No. 5-B Files & Mabry, Section 44-21-15, Pine Island Field, Caddo Parish, Louisiana, was bailed in late Tuesday making 25,000,000 feet of gas with a showing of oil from the Trinity horizon at 3,767 feet. It will be allowed to blow to start oil production as in other deep wells completed in the field.

EXPORTING PANHANDLE GAS IS PERMISSIBLE

AUSTIN, Tex., Aug. 6.—Representatives of the Kansas-Texas Pipe Line Co. were before the Railroad Commission with reference to gas pipe line distribution from the Panhandle fields. The commission was informed that the line to Kansas City is almost completed and that the right of way and pipe has been purchased for the line to Denver, Colo., and construction actually started.

There was some protest from the Panhandle section when the proposition was first broached, but an examination of the authorities, as made by the attorney-general, showed it was interstate commerce and had the right of way with no interference by state officials.

DATA ON WELLS IN THE HENDRICKS POOL OF WINKLER COUNTY

Company, No. well and lease—	Sec.	Blk.	Elev.	T. S.	Elev. T. S.	Top lime	Elev. T. L.	Top pay	Elev. T. P.	Interval T.L.-T.P.	Total depth	Init. prod.
Southern Crude No. 1 T-67 Hendrick	42	B-5	2,826	1,930	896	2,675	151	2,997	—171	322	3,049	400
No. 1 T-88 Hendrick-A	44	26	2,845	1,907	938	2,630	215	2,929	—84	299		560
No. 1 T-88 Hendrick-B	4	12	2,784	1,720	1,064	2,616	168					
No. 1 T-88 Hendrick-C	33	B-5	2,823	1,926	897	2,605	218	2,915	—92	310	2,988	1,070
No. 2 T-88 Hendrick-C	33	B-5	2,824	1,920	904	2,720	104	3,046	—222	326	3,062	200
No. 3 T-88 Hendrick-C	33	B-5	2,816	1,870	946	2,630	186					
No. 4 T-88 Hendrick-C	33	B-5	2,814			2,600	214					
No. 1 T-88 Hendrick-F	33	B-5	2,817									
No. 1 T-89 Hendrick-A (Grisham-Hunter-A)	35	B-5	2,817									
Gulf Prod. Co. No. 1 T. G. Hendrick	34	B-5	2,820	1,665	1,155	2,538	282	2,824	—4	286	2,842	2,580
No. 2 T. G. Hendrick	34	B-5	2,826									
No. 3 T. G. Hendrick	34	B-5	2,818	1,825	993							
No. 4 T. G. Hendrick	34	B-5	2,818									
No. 5 T. G. Hendrick	34	B-5	2,821	1,590	1,231	2,443	378					
No. 6 T. G. Hendrick	34	B-5	2,825	1,575	1,250	2,368	457					
No. 7 T. G. Hendrick	34	B-5	2,826	1,700	1,126	2,464	362					
Independent No. 1 T. G. Hendrick	42	B-5	2,825	none		2,720	105	3,049	—224	329	*3,093	60
No. 1 Ida Hendrick	34	B-5	2,816	1,785	1,031	2,560	256					
No. 2 Ida Hendrick	34	B-5	2,822									
Atlantic O. P. No. 1 Hendrick	34	B-5	2,823			2,458	365					
Pure Oil Co. No. 1 Hendrick	41	B-5	2,823	1,670	1,153	2,515	308					
No. 2 Hendrick	41	B-5	2,823	1,518	1,305	2,390	433					
No. 1 Hendrick-B	34	B-5	2,827									
Texon O. & L. Co. No. 1 Hendrick	41	B-5	2,824	1,610	1,217	2,320	504					
Humble O. & R. No. 1 Hendrick	34	B-5	2,824	1,480	1,344	2,325	499					
No. 2 Hendrick	34	B-5	2,825									
No. 1 Hendrick, Group 1	36	27	2,836									
Murchison-Marland No. 1 Hendrick	35	B-5	2,811	1,387	1,436	2,280	531					

*Water at 3,090 feet, sulphur water; plugged back; pay 3,049-60 feet.

ANNOUNCEMENT

of

CONSOLIDATION

by the

POWER SPECIALTY COMPANY

and the

WHEELER CONDENSER AND ENGINEERING CO.

under the new name of

FOSTER WHEELER CORPORATION

This combination of non-competitive interests operating in the same fields will effect material economies and betterments of importance to owners and purchasers of auxiliary power plant equipment and oil refinery apparatus.

The time proven Foster, Wheeler and Aero products will be continued.

The management of the new corporation will remain in the hands of those executives and engineers who have been responsible for the successful development of the products and organizations for more than twenty years.

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Works: Cartaret, New Jersey, Dansville and Newburgh, New York, St. Catharines, Ontario, Canada, and Egham, Surrey, England.

WILDCAT OPERATIONS IN WEST TEXAS

(Continued from Page 38)

Magnolia Petroleum Co.'s No. 2 Shannon ..... Show oil 2,385-90 and 2,992 ft.; total depth 4,100 ft.; fishing 20 joints 8-in. casing.

Newman Oil Co.'s No. 1 B. C. Clark ..... Location.

William Shaffer et al's No. 1 University, C SE SE Sec. 9, Blk. 47, University Sur., elev. 2,344 ft. ..... Total depth 2,344 ft.; plugged back to 2,208 ft.; shot 10 qts. 2,170-95 ft.; shut down.

William Schaffer et al's No. 2 University, 1,350 ft. N and 2,610 ft. E of SW cor. Sec. 9, Blk. 47, Uni. Land.... Top salt 1,060 ft.; drilling 2,140 ft.

W. W. Donnelly, Young, Logan & Hult's No. 1 Pierce, C SW Sec. 150, Blk. O. G. H. & S. A. Sur., elev. 2,105 ft. ..... Rainbow show 454 and 540 ft.; underreaming 1,375 ft.

Kirby Oil Co. and Taylor-Link Oil Co.'s No. 1 Powell.... Drilling 800 ft.

F. H. Williams' No. 2 L. P. Powell ..... Drilling 400 ft.

McMammon Oil Co.'s No. 1 Blakeney ..... Rig.

Young & Donnelly's No. 1 J. M. Shannon, C Sec. 11, Blk. 9, D. & S. E. Sur. ..... Spudded and shut down.

CULBERSON COUNTY

James H. Gardner et al's No. 1 Radford, C SE Sec. 29, Blk. 62, Public School Land Sur. ..... Shut down 545 ft.; crooked hole.

Scott & Dittman's No. 1 Miller, SW cor. NW NE Sec. 1, School Blk. 97 ..... Spudded and shut down.

DAWSON COUNTY

R. R. Penn's No. 1 Wright, elev. 2,842 ft. ..... Top salt 1,750 ft.; drilling 2,330 ft.

ECTOR COUNTY

J. S. Cosden, Inc., et al's No. 2 Connell-A, NW cor. NE Sec. 13, B-16, School Land, elv. 2,844 ft. ..... Top salt 870 ft.; top lime 3,177 ft.; first show 3,420-22 ft.; pay 3,471-3,515 ft.; 160 ft. oil in hole; shot 180 qts.; estimated 1,000,000 ft. gas; swabbed and flowed 82 bbls. June 30; cleaned out and shut down for orders; 800 ft. oil in hole.

J. C. Cosden et al's No. 3 G. W. Connell-A, SE cor., NE, Sec. 13, Blk. B-16. ..... Top salt 863 ft.; show oil 3,375 ft. and 3,499 ft.; top lime 3,195 ft.; shot 208 qts. 3,465-3,545 ft.; 300 ft. oil in hole; shut down.

FISHER COUNTY

Zoch & McCamey and Marland Oil Co.'s No. 1 Lanius A (was Danciger O. & R. Co.'s No. 1 Lanius), NE cor. SE Sec. 15, Blk. Y. T. & P. Sur. ..... Set 5-in. 3,661 ft.; hole full water 3,770 ft.; small show gas 3,906 ft.; drilling 4,225 ft.

Ideal Oil Co.'s No. 1 Jameson, C SE Sec. 111, Blk. 1, H. & T. C. Sur. ..... Hole full salt water 2,345-2,520 ft.; shut down for orders 3,304 ft.

Marland Oil Co. and Texon's No. 1 McCall, Sec. 108, Blk. 3, H. & T. C. Sur. ..... Rig.

Miley Oil Corp. and Marland Oil Co.'s No. 1 W. W. Ammons, Sec. 198, Blk. 3, H. & T. C. Sur. ..... Drilling 2,790 ft.

R. W. Raney's No. 2 Maberry, Sec. 56, Blk. 1, T. & P. Sur. ..... Shut down for orders 2,725 ft.

Sinclair Oil & Gas Co.'s (was Bourdon Royalty Co.'s) No. 1 J. A. Danise, Sec. 6, Blk. K, T. & P. Sur..... Drilling 1,625 ft.

The Texas Company's No. 1 D. S. Stevens, C SW SE SE Sec. 79, Blk. 1, H. & T. C. Sur. ..... Eight-in. froze 2,032 ft.; fishing.

FOARD COUNTY

C. H. Clark et al's No. 1 Atkins, SW cor. Sec. 89, Blk. 44, H. & T. C. Sur. ..... Rig; moving in tools.

Fain-McGaha Oil Corp.'s No. 1 Mathews..... Made 50 bbls. 1,434-94 ft.; deepening at 1,580 ft.

Humble O. & R. and Navarro Oil Co.'s No. 1 L. McAdams, C S ½ Sec. 27, Blk. L, S. P. Sur. ..... Hole full water 2,560 ft.; water sand 3,460-70 ft.; underreaming 6-in. at 3,500 ft.

The Texas Company's No. 1 Watkins ..... Drilling 1,800 ft.

GAINES COUNTY

Westheimer & Daube's No. 1 Birge & Forbes Land Co., Sec. 308, Terrell County School Land ..... Cemented 8-in. 2,900 ft. and shut down for cable tools.

GARZA COUNTY

Emerald Oil Co.'s No. 1 D. Boren, NW cor. NE Sec. 137, Blk. 5, H. & G. N. Sur. ..... Small show oil in gray lime 1,884-1,902 ft.; shut down 2,600 ft.; show oil and hole full water 2,420-60 ft.

Pandem Oil Co.'s No. 1 Justice, SW cor. NW Sec. 2, Blk. 6, H. & G. N. Sur. ..... Fishing casing 1,823 ft.

GLASSCOCK COUNTY

California Co.'s No. 1 W. B. Currie, Sec. 215, Blk. 29.... Total depth 775 ft.; underreaming 12-in.

Green et al's No. 1 F. G. Oxsheer, Sec. 6, Blk. 34, T. & P. Sur., elev. 2,540 ft. ..... Top salt 1,245 ft.; drilling 2,000 ft.

Landreth Producing Corp.'s No. 1 A. L. Houston, elev. 2,611 ft. ..... Top salt 1,410 ft.; shut down 2,620 ft.

World Oil Co. and J. S. Meriwether's No. 1 L. S. McDowell, C SW Sec. 43, Blk. 34, Twp. 2-S, T. & P. Sur., elev. 2,553 ft. ..... Top salt 1,180 ft.; drilling 2,530 ft.

Sid Richardson, C. O. Collins and Merle Cadman's No. 1 Burns, NE cor. SW Sec. 183, Blk. 29. ..... Preparing to plug 2,439 ft.

HOWARD COUNTY

California Co.'s No. 1 Fisher Brothers, SE SW NW Sec. 36, Blk. 33, T. & P. Sur. T-1-S ..... Rig.

Fred Carey et al's No. 2 G. O. Chalk, SE NW Sec. 124, Blk. 29 ..... Shut down 1,040 ft.; hole full salt water.

W. W. Donnelly et al's No. 1 Martin, SE cor. Sec. 41, Blk. 33, T-2 N, T. & P. Sur., elev. 2,552 ft..... Building standard rig 2,100 ft.

Henshaw et al's No. 1 S. T. Eason, Sec. 6, Blk. 32, T. & P. Sur., T-2-S..... Drilling 1,320 ft.

Marland Oil Co. and Zoch's No. 1 Jones, Sec. 32, Blk. 27, T. & P. Sur., elev. 2,218 ft. ..... Shut down 500 ft.

Marland Oil Co.'s No. 1 A. M. Fisher, Sec. 1, Blk. 33, T. & P. Sur., T-2-S, elev. 2,730 ft. ..... Total depth 1,435 ft.; trying to loosen casing.

Marland Oil Co.'s No. 1 A. G. Haines, C SE Sec. 20, Blk. 32, T. & P. Sur. T-1-N ..... Building rig.

Peer Oil Corp.'s No. 1 Read, C NW Sec. 39, Blk. 30, T. & P. Sur. T-1-N ..... Moving in rig.

Texon O. & L. Co. and Marland Oil Co.'s No. 1 Mrs. Connaly ..... Location.

Texon O. & L. Co.'s and Marland Oil Co.'s No. 2 W. R. Settles ..... Drilling 300 ft.

Texon O. & L. Co. and Marland Oil Co.'s No. 1 Mabel O. Quinn ..... Drilling 760 ft.

HUDSPETH COUNTY

Lockhart Brothers' No. 1 Gardner & Moseley, C SE Sec. 5, School Blk. 21 ..... Shut down 235 ft.

IRION COUNTY

Cash Dollar et al's No. 1 G. J. Bird, NE Sec. 16, Blk. 10, S. P. R. R. Sur. ..... Shut down 2,500 ft.

Marland Oil Co.s No. 1 University-Anderson, Sec. 19, Blk. 58, University Land ..... Location.

REEVES COUNTY

Deep Rock Oil Co.s No. 1 Caldwell, C SW Sec. 22, Blk. 58, T. & P. Sur., Twp. 8 ..... Hole full sulphur water 3,590 ft.; and 3,966-70 ft.; shut down for orders 4,005 ft.

Exploration Co.s No. 1 A. A. Kinney, 1,500 ft. W of NE cor. Sec. 26, Blk. C-18, Public School Land..... Spudded 20 ft. and shut down.

Humble O. & R. Co.s No. 1-B Kloh, C NE Sec. 47, Blk. 56, T. & P. Sur. T-2-S, elev. 2,781 ft. ..... 900 ft. sulphur water 1,760-1,800 ft.; top salt 2,765 ft.; top Delaware 3,333 ft.; 2,000,000 ft. gas 3,696-97 ft.; drilling wet hole 3,698 ft.

David R. Thompsons No. 1 A. A. Eddins ..... Moving in tools.

World Oil Co.s No. 1 Biggs, C SE Sec. 65, Blk. 112, Public School Land Sur., elev. 3,068 ft..... Shut down 1,610 ft.; tools moved to No. 1 Duff.

World Oil Co.s No. 1 Duff, elev. 2,753 ft. ..... Show gas with six bailers oil and hole full of water 2,648-50 ft.; set 6-in. 2,680 ft.; drilling 3,095 ft. anhydrite and gypsum.

RUNNELS COUNTY

Noble Oil Co.s No. 1 Simms, Sec. 12, J. J. McHenry Sur... Shut down 1,675 ft.; underreaming 10-in.

SCHLEICHER COUNTY

Beavers & Leath et als No. 1 J. A. and W. T. Whitten, C NW Sec. 35, Blk. 11, T. O. Sur. ..... Spudded and shut down.

Thomas Grey et als No. 1 Ball Robinson, C NW Sec. 25, Blk. M, G. H. & S. A. Sur. ..... Sulphur water 2,125 ft.; total depth 2,145 ft.; underreaming 8-in.

STERLING COUNTY

L. Littles No. 1 Fisher Bros., Sec. 1, Blk. T, T. & P. Sur.. Shut down 1,436 ft.

Orr et als No. 1 Neal Reed, CNL Sec. 15, Blk. 30, W. & N. W. Sur. ..... Drilling 600 ft.

J. P. Williams' No. 3 Clark..... Drilling 550 ft.

STONEWALL COUNTY

Peer Oil Corp. and Producers Oil Co.'s (was J. P. Johnson's) No. 1 R. P. Morrow ..... Underreaming 12-in. 975 ft.

R. F. Garland & Co.s (was McCamey & Zochs) No. 1 J. Ward, C SW Sec. 153, Mrs. Ward Dobbs Sur., 3 mi. NW of Aspermont ..... Drilling 2,840 ft.

TAYLOR COUNTY

A. J. Brown et als No. 1 Henslee, NE cor. Sec. 5, Blk. 4, S. P. R. R. Sur. ..... Shut down for orders 930 ft.

Dorning & Perrines No. 1 J. A. Hammer, C N 100 acres, Sec. 23, Blk. 19, T. & P. Sur., elev. 1,904 ft... Shut down 455 ft.

Gilbert Johnsons No. 1 C. M. Brown, Sec. 1, Blk. 6, T. & P. Sur. ..... Spudded and shut down.

W. E. Halbert et als No. 1 Hunt, C SE Sec. 124, Blk. 64, H. & T. C. Sur. ..... Drilling 2,805 ft.

Morrison & Thompsons No. 1 Mrs. Alice Rose, SW cor. NE Sec. 29, Blk. 19, T. & P. Sur., Sur. elev. 1,925 ft... Shut down 2,540 ft.; fishing tools.

Owen & Sloans No. 1 Lattimer, Sec. 14, Blk. 9, T. & P. Sur. ..... Underreaming 6-in. 2,465 ft.

Roeser & Pendleton's No. 1 Sam Hutman, C W ½ NW Sec. 64, Blk. 5, T. & P. Sur. ..... Drilling 1,005 ft.

Sanger O. & R. Co.s No. 1 Ike Brown, NE cor. Sec. 54, Blind Asylum Land ..... Shut down for orders 3,504 ft.

Sanger O. & R. Co.s No. 1 Stem ..... Location.

World Oil Co.s No. 1 J. R. Griffith, SW cor. NE Sec. 32, Blind Asylum Land, elev. 1,747 ft. ..... Water at 2,850 ft.; drilling 3,470 ft.

TERRY COUNTY

Kingsland Oil & Potash Co.s No. 1 Brownsfield, C NW SW SW Sec. 7, Blk. 1-A, E. L. R. R. Sur. ..... Shut down 2,200 ft.

TOM GREEN COUNTY

George Amery's No. 1 Wilkey, C SW Sec. 3, B. A. L. Sur. ..... New location.

Dullahan et al's No. 1 Jacobs, Sec. 1,011, H. E. & W. T. Sur. ..... Shut down for orders 632 ft.

Fitzgerald et al's No. 1 Bennett ..... Drilling 810 ft.

Marland Oil Co.'s No. 1 Llano, 3,500 ft. S and 13,000 ft. W of NE cor. Llano Co. School Land No. 964... Drilling 3,305 ft.

Tulsa Oil Co.'s No. 1 Adams, C SW Sec. 162, Blk. 11, S. P. R. R. Sur. ..... Shut down 735 ft.

UPTON COUNTY

Champlin O. & R. Co.'s No. 1 J. F. Lane, SW cor. SE Sec. 3, G. C. & S. F. Sur..... Top salt 525 ft.; drilling 1,605 ft.

Mark Curtis et al's (was Hultz et al's) No. 2 Giddings, 5,336 ft. S and 6,678 ft. E of NW cor. Throckmorton Co. School Land, League 1 ..... Spudded water well and shut down.

J. M. Hickey's No. 1 W. I. Gormley, 1,650 ft. from SW and SE lines Sec. 7, Blk. 36, H. & T. C. Sur. ..... New location; drilling 130 ft.

Humble O. & R. Co.'s No. 6 Ricker, SE of No. 5 in Sec. 5, M. S. Denton Sur. ..... New location; moving in material.

Levi Smith and Marland's No. 1 University, C E ½ Sec. 17, Blk. 5, University Land ..... Hole full salt water 630-40 ft.; drilling 2,800 ft.

Marland Oil Co.'s No. 3 Burleson, T. C. Jones Sur. No. 100 ..... First pay 2,205 ft.; second pay 2,295 ft.; 2,000 ft. sulphur water 3,390-95 ft.; 1,000 ft. sulphur water 4,135 ft.; fishing bit 4,610 ft.; shut down.

Marland Oil Co.'s No. 34 Burleson, Sec. 100, T. C. Jones Sur. ..... Shut down 3,255 ft.

Simms Oil Co.'s No. 1 B. C. Clark, NE cor. SW Sec. 5, G. C. & S. F. Sur., elev. 2,473 ft. ..... Top salt 470 ft.; top lime 1,718 ft.; sulphur water 1,834-50 ft.; plugging to abandon at 2,561 ft.

The Texas Company's No. 3 J. M. Perry, Sec. 3, G. C. & S. F. Sur. ..... Top salt 538 ft.; drilling 1,150 ft.

Wise & Jackson's No. 1 J. H. Porter, SW cor. SW SW Sec. 184, Blk. E ..... Top salt 1,370 ft.; fishing bit at 2,520 ft.

VAL VERDE COUNTY

A. Blume et al's No. 1 Moore est., Sec. 183, J. Mitchell Sur., elev. 953 ft. ..... Shut down 3,000 ft.

Curso Williams' No. 1 Holman, NE NE Sec. 5, Blk. N, G. H. & S. A. Sur. ..... Shut down 2,940 ft.

Douglas Oil Co.'s No. 1 Sellars, C SE Sec. 82, Blk. A, I. & G. N. Sur. ..... Drilling 2,950 ft.

East Del Rio Oil Co.'s No. 1 Russell, SE cor. Sec. 183, Del Rio Town Sur. ..... Shut down 3,190 ft.; 25,000 ft. gas.

Hiawatha Oil Co.'s No. 1 Sellars, C Sec. 1,031, Blk. A, I. & G. N. Sur... ..... Hole full salt water 2,455 ft.; straightreaming 3,125 ft.

Magnolia Petroleum Co.'s No. 1 Whitehead, Sec. 81, D. G. C. & S. F. Sur., elev. 1,770 ft..... Drilling 2,125 ft.

Independent Operators' No. 1 Whitehead, SE SE Sec. 30, Blk. 4, I. & G. N. Sur., elev. 1,175 ft. ..... Shut down 2,900 ft.

O. O. Owens' No. 1 Mills, Sec. 128, Blk. 1, I. & G. N. Sur., elev. 2,130 ft. ..... Gas sand 2,491-2,520 ft.; tested 125,750 ft. gas; reset 8-in. 2,511 ft.; cleaning out.

WINKLER COUNTY

Amerada Pet. Corp.'s No. 1 J. B. Walton, SW cor. NW Sec. 48, Blk. 26 ..... New location.

Atlantic O. P. Co.'s No. 1 Hendricks, SE cor. W ½ NE Sec. 44, Blk. 26 ..... New location.

Atlantic O. P. Co.'s No. 1 Hendricks, Sec. 34, Blk. B-5, elev. 2,823 ft. ..... Cemented 6-in. at 2,548 ft.; shut down 2,522 ft.

V. T. Bolin's No. 1 Ida Hendrick, C SE NE Sec. 4, Blk. B-5 ..... Location.

Champlin Drilling Co.'s No. 1 C. W. Cowden, C SW Sec. 21, Blk. C-23, Public School Land, elev. 2,889 ft..... Hole full water 2,385 ft.; shut down at 3,505 ft.; contract depth.

Cranfill Brothers' No. 1 M. J. Bashara, at cor. Secs. 10, 11, 22 and 23, School Blk. 77 ..... Location.

Cranfill & Reynolds' No. 1 Ida Hendrick, C SW NW NW Sec. 28, Blk. B-5 ..... Location.

Group 1 Humble O. & R. Co.'s No. 1 T. G. Hendricks, C SE Sec. 36, Blk. 27, elev. 2,823 ft. ..... Drilling 1,750 ft.

Humble O. & R. Co.'s No. 1 T. G. Hendricks, NW cor. NE Sec. 34, Blk. B-5, Public School Land, elev. 2,816 ft. ..... Pocket of gas at 2,500 ft.; blew tools out through rig; estimated 5,000,000 ft. gas; drilling 2,590 ft.

Humble O. & R. Co.'s No. 2 T. G. Hendricks, SE cor. NE Sec. 34, Blk. B-5..... Rigging up.

Independent O. & G. Co.'s No. 1 J. S. Howe-D, NE cor. W ½ SE Sec. 44, Blk. 26 ..... New location.

Independent O. & G. Co.'s No. 1 Hendricks-A, elev. 2,816 ft. ..... 250,000 ft. gas 2,555-75 ft.; set 8-in. 2,595 ft.; pulled rig in; rebuilding and rigging up.

Independent O. & G. Co.'s No. 2 Hendricks-A, elev. 2,822 ft. ..... Total depth 1,430 ft.; drilling 1,485 ft.

Landreth Prod. Corp.'s No. 1 Grisham-Hunter, SW cor. SW NW Sec. 45, Blk. 26, School Land ..... New location; building rotary rig.

McCullough Oil Co.'s No. 1 Tobe Morton, CEL Sec. 20, Blk. L-12, Public School Land, elev. 2,750 ft. ..... Hole full salt water 1,940 ft.; drilling up underreaming lugs 2,020 ft.

R. S. Matthews et al's No. 1 State, C Sec. 7, Blk. A-57, Public School Land Sur., elev. 3,120 ft. ..... Top salt 1,623 ft.; drilling 1,735 ft.

Murchison Oil Co. and Marland's No. 1 Grisham-Hunter, NW cor. SW Sec. 35, Blk. B-5 ..... Top lime 2,280 ft.; 8,000,000 ft. gas 2,425 ft.; shut down for iron oxide.

Pure Oil Co.'s No. 1 Hendricks, SW cor. Sec. 41, Blk. B-5, Public School Land, elev. 2,823 ft. ..... Flowed 735 bbls. in 3 hours at 2,837-38 ft.

Pure Oil Co.'s No. 2 Hendricks, elev. 2,827 ft. ..... Top salt 1,518 ft.. top lime 2,390 ft.; cemented 8-in. 2,479 ft. and rigging up standard tools.

Pure Oil Co.'s No. 1 Hendricks-B, NE cor. SE, Sec. 34, Blk. B-5 ..... Rigging up rotary.

Roxana Petroleum Corp. and Llano Oil Co.'s No. 1 Scarborough, C Sec. 1, Blk. C-22, Public School Land, elev. 2,921 ft. ..... Top salt 1,115 ft.; hole full water 1,321 ft.; 10-in. set 1,570 ft.; top pay 2,990 ft.; second pay 3,124-28 ft.; swabbed 115 bbls. July 17; total depth 3,447 ft. (steel line measurement). sulphur water; plugged back to 3,347 ft.; raised pipe to 2,975 ft.; will shoot with 200 qts. 3,120-3,300

Southern Crude Oil Pur. Co.'s No. 3-C Hendricks, SE cor. NE Sec. 33, Blk. B-5, elev. 2,816 ft. ..... Top salt 1,870 ft.; little gas 2,630-40 ft.; shut down for orders 2,735 ft.; making 2,000,000 ft. gas and 1 bbl. oil; top lime 2,630 ft.; shut down for orders 2,735 ft.

Southern Crude Oil Pur. Co.'s No. 4-C Hendricks..... Cemented 8-in. 2,525 ft.; small show oil and gas 2,660-65 ft.; gas increased 2,689-90 ft.; connecting up.

Southern Crude Oil Pur. Co.'s No. 1 Hendricks A-1, SE cor. NE Sec. 44, Blk. 26, elev. 2,854 ft. ..... Top pay 2,930 ft.; best gauge 912 bbls.; now flowing 167 bbls.; drilling at 2,958 ft.

Southern Crude Oil Pur. Co.'s No. 1 Hendricks-B (was No. 1-D), SE cor. NE NW Sec. 4, Blk. B-12..... Top lime 2,616 ft.; standardizing.

Southern Crude Oil Pur. Co.'s No. 1-F Hendricks, Sec. 33, Blk. B-5, NE cor. SE ..... Cemented 6-in. 2,529 ft.; standardizing.

Southern Crude Oil Pur. Co.'s No. 1 T-89 Grisham-Hunter-A, CWL NE SW Sec. 35, Blk. B-5 ..... Drilling 600 ft.

Texon O. & L. Co.'s No. 1 Central State Bank, SW cor. W ½ SE Sec. 41, Blk. B-5, elev. 2,826 ft. ..... Top lime 2,340 ft.; set 6-in. 2,340 ft.; 3,000,000 ft. gas 2,460-70 ft. and 2,500-20 ft.; more gas 2,573 ft.; gas decreased to 5,000,000 ft.; drilling 2,723 ft.

White Eagle O. & R. Co.'s (was Gibson & Johnson's), No. 1 R. A. Lock, 1,320 ft. W of NE cor. Sec. 30, Blk. 74, NW of discovery well, elev. 2,830 ft..... Swedging 8-in. 1,875 ft.

Southern Crude O. P. Co.'s No. 3 T-67 Hendrick-A, C SW NW NE Sec. 4, Blk. B-12 ..... Building rotary derrick.

Southern Crude O. P. Co.'s No. 1 T-67 Hendrick-B, NE cor. SE Sec. 44, Blk. 26 ..... Moving in rotary drawworks.

Tidal Oil Co.'s (was L. D. Ladd et al's) No. 1 J. W. Amburgey, C Sec. 24, Blk. B-7, Public School Land.... Was completed at 3,447 ft. in June; now rigging up to deepen.

Southern Crude O. P. Co.'s No. 3 T-68 Grisham-Hunter-A, SW cor. W ½ NW Sec. 35, Blk. B-5 ..... New location.

JONES COUNTY

Midwest Exploration Co.'s (was Campbell et al's) No. 1 L. H. Herndon, Sec. 6, M. E. P. & P. Sur., elev. 1,832 ft. ..... Top pay 2,498 ft.; deepening to 2,524 ft.; swabbed 115 bbls.; shut down for orders 3,009 ft.

Garland & Diamond's No. 1 E. D. Glynn, SE cor. Sec. 18, Deaf & Dumb Asylum Lands ..... Seven bailers salt water per hour at 1,465-1,500 ft.; underreaming casing 1,505 ft.

Gillette & Hickey's No. 1 M. E. Young, Tevanio Sur. No. 190 ..... Swedging casing 1,750 ft.

Hutson & Weaver's No. 1-A Smith, Sec. 51, Blk. 18, T. & P. Sur. ..... Rigging up second hole.

Kirk & Brewer's No. 1 J. H. Milsap, Justo Rodriguez Sur., League 357 ..... Hole full salt water 2,403-10 ft.; rainbow show oil 2,720 ft.; set 6-in. at 2,900 ft.; cleaning out at 2,910 ft.

Manhattan Oil Co.'s No. 1 S. W. King, Sec. 198, James Bartlett Sur. ..... Drilling 2,320 ft.

Marston Oil Co.'s No. 1 E. Howell, NW cor. SE W ½ of N 400 acres, Sec. 20, Blk. 19, T. & P. Sur..... Small show oil 2,496 ft.; shut down 2,545 ft.

Marston Oil Co.'s No. 1 J. S. Swan, Robert Spears Sur. No. 280 ..... Hole full salt water 2,390-2,400 ft. and 2,435 ft.; hole full salt water 3,015-20 ft.; shut down 3,503 ft.

W. G. Stough and others' No. 1 J. P. Willis, J. C. Patterson Sur. No. 2 ..... Shut down for casing 1,500 ft.

Stebbins Oil Co.'s No. 2 Higgs, SE cor. Sec. 30, W. T. Scott Sur. ..... Location.

Swensondale Oil Co.'s No. 1 Caton, SW NW Sec. 9, Deaf & Dumb Asylum Lands ..... Repairing boiler 2,170 ft.

Tomberlin et al's No. 1 Oscar Clapp, CSL SW Sec. 37, Blk 16, T. & P. Sur. ..... Underreaming 2,050 ft.

KENT COUNTY

Douglas Oil Co.'s No. 1 Scoggins, Sec. 57, Blk 7, H. & T. C. Sur. ..... Drilling 4,240 ft.

Marland Oil Co. and Texon O. & L. Co.'s No. 1 Bilby, Sec. 41, Blk. K, Thompson Sur. ..... Location.

KNOX COUNTY

Deep Rock Oil Co.'s No. 1 Beavers, CSL Sec. 224, Blk. 44, elev. 1,441 ft. ..... Total depth 2,865 ft.; rig burned down second time.

Deep Rock Oil Co.'s No. 1 Big Four, 1,270 ft. S and 2,590 ft. W of NE cor. Sec. 31, Blk. 4..... Shut down for 10-in. 1,150 ft.

Humble O. & R. Co.'s No. 1 Goode, 1,940 ft. S and 200 ft. W of NE cor. Sec. 7, H. T. & B. Sur. ..... Hole full water 1,710-15 ft., and 2,760-2,800 ft.; drilling 2,875 ft.

The Texas Company's No. 1 J. O. Bowden, Sec. 115, Blk. 45, H. & T. C. Sur. ..... Lime 1,240-45 ft.; estimated 100,000 ft. gas; hole full water 1,835 ft.; shut down 2,000 ft.

The Texas Company's No. 1 Teague ..... Drilling 2,350 ft.

LOVING COUNTY

Kingwood Oil Co.'s No. 1 T. O. Moore, C NE Sec. 2, Blk. G-25, Public School Land, elev. 3,120 ft..... Top salt 1,210 ft.; show gas 1,600-15 ft.; total depth 2,725 ft.; drilling by casing at 2,025 ft.

Owens & Sloan's No. 1 W. D. Johnson, C SE Sec. 20, Blk. 53, T-2, T. & P. Sur., elev. 2,934 ft. ..... Shut down 1,020 ft.; in litigation.

LYNN COUNTY

The Hart Oil Corp.'s No. 1 C. O. Edwards, NW NW Sec. 5, Blk. 2, L. & S. V. Sur. ..... Shut down 1,400 ft.

MIDLAND COUNTY

Orbit Oil Co.'s No. 1 Moreland, C SE Sec. 17, Blk. 39, T. & P. Sur. T-1-S ..... Shut down 185 ft.

MITCHELL COUNTY

Robert Thraves' No. 1 C. Way, Sec. 91, Blk. 27, T. & P. Sur. T-1-N ..... Fishing tools 2,240 ft.

Magnolia Petroleum Co.'s No. 1 T. L. McKenney, Sec. 20, Blk. 29, T. & P. Sur. T-1-N..... Drilling 4,065 ft.

Magnolia Petroleum Co.'s No. 2 W. W. Watson ..... Plugging at 4,154 ft.

Tex-O-Kan Oil Co. and Robert Thraves' No. 1 W. F. Sanders ..... Drilling 2,420 ft.

B. E. Walter et al's No. 1 J. E. Dollen, NW cor. SW Sec. 11, Blk. 27, T. & P. Sur. ..... Shut down 3,955 ft.; hole full sulphur water.

NOLAN COUNTY

J. H. Winemiller Corp.'s (was Peters et al's) No. 1 Booth, Sec. 90, Blk. 21, T. & P. Sur. ..... Shut down 1,835 ft.

Herbert Oil Co.s (was McClesky and others') No. 1 Pepper, SE cor. SW Sec. 29, Blk. 22, T. & P. Sur.... Rigged up and shut down.

Phillips Petroleum Co.'s No. 1 Scott, Sec. 58, Blk. 21, T. & P. Sur. ..... Hole full water 3,580 ft.; underreaming 6-in. 3,668 ft.

Zweifel and others' No. 1 Longbotham, C SE Sec. 130, Blk. 1, H. & G. N. Sur. ..... Underreaming 2,485 ft.

PECOS COUNTY

Allaman & Bell's No. 2 Pecos River Bed ..... Top salt 400 ft.; drilling 690 ft.

Benedum & Trees' No. 1 J. C. Trees, C NW SE SE Sec. 30, Blk. 7, H. & G. Sur., elev. 2,556 ft. ..... Flowed sulphur water 3,250 ft.; shut down 3,335 ft.

Buell et al's No. 1 Batcheler, C N ½ NE Sec. 89, Blk. OW, G. C. & S. F. Sur., elev. 3,188 ft. ..... Show oil 1,700 ft.; flowed sulphur water 1 775 ft.; fishing 2,740 ft.

Buell & Hagan's No. 1 Jasper, 1 mi. S and W NE cor. Jasper Co. School Land No. 104 ..... Fishing bit 510 ft.

M. C. Dibble & Hale's No. 1 Bonebrake, Sec. 115, Blk. 8, I. & G. N. Sur. ..... Shut down 500 ft.

Bob Elmore's No. 1 M. Holmes, Sec. 542, Blk. 1, I. & G. N. Sur., elev. 2,176 ft. ..... Top salt 335 ft.; drilling 780 ft.

Garland & Mott's No. 1 El Paso Cattle Loan Co., C NE Sec. 26, Blk. 126, T. & S. L. Sur., elev. 2,562 ft. ..... Drilling 1,800 ft.; hole full fresh water at 650 ft.

Gulf Production Co.'s No. 1 Smith, NE cor. Sec. 28, Blk. 194 ..... Spudded August 3.

Geo. A. Henshaw, Jr., No. 1 Snyder, Sec. 29, Blk. 144, T. & St. L. Sur. ..... Location.

McMan O. & G. Co. and Marland Oil Co.'s No. 1 Yates, 330 ft. N and W of NE cor. Sec. 35, Blk. 194, but located in Sec. 34½, elev. 2,538 ft. ..... Good show oil 575 ft.; top lime 1,224 ft.; cementing 8-in. 1,227 ft.

Marland Oil Co.'s No. 1 Yates, NE cor. Sec. 60, Blk. 1, I. & G. N. Sur., elev. 2,172 ft. ..... Small show oil and gas 445 ft.; 10 bailers fresh water per hour at 465 ft.; total depth 840 ft.

Mazda Oil Co.'s No. 1 M. A. Smith, NE cor. NW Sec. 24, Blk. 194, G. C. & S. F. Sur., elev. 2,720 ft. ..... Top salt 850 ft.; drilling 1,026 ft.

Moutray Oil Co.'s (was Pecos Big 3 Oil Co.'s) No. 1 Robertson, Sec. 28, Blk. 10, H. & G. N. Sur., elev. 2,572 ft. ..... Drilling 1,207 ft.

Mid-Kansas and Transcontinental Oil Co.'s No. 2 Smith-Taylor ..... Moving in material.

Mid-Kansas and Transcontinental's No. 3 Yates-B..... Drilling 856 ft.; 1,500,000 ft. gas 850 ft.

Mid-Kansas and Transcontinental's No. 7 Yates-A ..... Drilling 1,010 ft.

Mid-Kansas and Transcontinental's No. 8 ..... Clearing location.

Quinby Oil Co.'s No. 1 Townsite, Sec. 1, Blk. 267, Client Addition Sur. Fort Stockton, elev. 2,980 ft. ..... Shut down 3,440 ft.

Quinby Oil Co.'s No. 2 Bennet, C NW 592, Blk. 105, G. C. & S. F. Sur., elev. 2,560 ft. ..... Shut down 1,457 ft.

Quinby Oil Co.'s No. 1 A. A. Gray, 660 ft. N and 1,320 ft. E SW cor. Sec. 593, Abst. 3,009 ..... Shut down 700 ft.

Red Bank Oil Co.'s No. 1 McKenzie, C N ½ Sec. 21, Blk. 126, T. & St. L. Sur., elev. 3,256 ft. ..... Show sulphur water 2,641 ft.; hole full water 2,660 ft.; fishing tools.

W. R. Shankel et al's No. 1 I. G. Yates, CSL SW SE SE Sec. 58, Blk. 1, I. & G. N. Sur., elev. 2,220 ft.... Top salt 425 ft.; 40 ft. oil 1,313 ft.; sulphur water 1,478-79 ft.; water plugged off; shut down.

Transcontinental Oil Co.'s No. 1 Blackstone & Slaughter, Sec. 29, Blk. 129, F. St. L. Sur. ..... Moving in material.

World Oil Co.s No. 1 Serf, SW cor. NE Sec. 10, Blk. 130, T. & St. L., elev. 3,245 ft. ..... Location.

PRESIDIO COUNTY

Headlock & Millers No. 1 Tootle est., Sec. 123, Blk. 3, D. & P. Sur., elev. 2,912 ft. ..... Salt water at 2,610 ft.; shut down 2,770 ft.

Pinto Canyon Oil Co.'s No. 1 Fields, 1,760 ft. S & E NW cor. Sec. 74, Blk. 2, D. & P. Sur. ..... New location.

REAGAN COUNTY

Henshaw & Camps No. 1 University, Sec. 14, Blk. 48, University Land ..... Rig shut down.

Texon O. & L. Co.s No. 1-B University, Group 1 ..... Top pay 6,284 ft.; shut down for motor 6,590 ft. with 3,800 ft. of 38.7 gravity oil in hole.

PANHANDLE FIELDS

(Continued from Page 40)

pany has a 10-inch line running into Lubbock from the Panhandle fields and it is likely the Midland line would be extended south from Lubbock, a distance of approximately 112 miles.

With the Knorpp pipe line going into Kansas City, and the West Texas company extension the investment by the gas industry in Panhandle and in pipe lines alone will run close to $100,000,000. Empire Gas & Fuel Co. is building a 20-inch line from Panhandle to Wichita, Kans., and later intends to extend it to Kansas City, Mo.

NEW LOCATIONS

The following are the six new locations announced for the Panhandle early this week:

Gray County

Gibson Oil Corp.'s No. 2 J. B. Bowers, 330 feet from the south line and 990 feet from the east line of north 120 acres of E half of Section 92, Block B-2, H. & G. N. Survey. Amogray Oil Co.'s No. 1 Chapman, 990 feet from the north line and 330 feet from the west line of SW, Section 9, Block 26, H. & G. N. Survey.

Roberts County

Roco Oil Co.'s No. 1 W. T. Hammond, 5,610 feet from north line and 4,925 feet from east line of Clay County school lands.

Dallam County

Marland Oil Co.'s No. 1 A. M. James, C SW W half, Section 21, S. H. McElreath Survey.

Carson County

Magnolia Petroleum Co.'s No. 5 fee, No. 244, SW cor. NE, Section 91, Block 4, I. & G. N. Survey. The Texas Company's No. 1 J. C. McConnell-B, 495 feet from the south line and 330 feet from the west line, NE cor. north 50 acres of NW, Section 185, Block 3, H. & G. N. Survey.

COMPLETIONS

Carson County

On the east side of the Roxana Pool The Texas Company's No. 3 M. P. Co. fee, Section 90, Block 4, I. & G. N. Survey, made 310 bbls. initial from granite wash pay at 3,115-20 feet.

Collingsworth County

Wischkamper's No. 1 fee, Section 93, Block 16, had 100 feet of water in the hole and was abandoned at 2,623 feet, steel line measurement.

Hockley County

El Capitan Oil Co.'s No. 1 Ellwood, SW cor. Section 55, Block A, R. M. Thompson Survey, and 18 miles northwest of Lubbock, was dry and abandoned at 3,504 feet.

Hutchinson County

Cockrell-McIlroy Oil Co.'s No. 2 Ellis Cockrell, Section 1, Block B-3, D. & S. Survey, topped the pay at 2,835 feet and bottomed at 3,010 feet. Lime at 2,835 to 2,900 feet was shot with 250 quarts and the well made 25 bbls. the first 24 hours on the swab. Derby Oil Co. and associates' No. 8 Johnson Brothers, Section 20, Block Y, M. & C. Survey, swabbed 286 bbls. the first 24 hours after a 100-quart shot at 2,986-99 feet; total depth 3,010 feet. In the Sanford area, McMan Oil & Gas Co.'s No. 1 J. M. Sanford, Section 83, Block 46, H. & T. C. Survey, failed to make a well at 3,065 feet and was plugged back to 2,990 feet and completed as a 30,000,000-foot gas well at 2,645 to 2,990 feet.

Phillips Petroleum Co.'s No. 3 Elra Whittenburg, Section 3, E. Tomlinson Survey, was good for 25 bbls. at 2,790

to 2,804 feet, but was shot with 40 quarts in that formation and completed as a 125-bbl. well. No. 14 on the same lease topped the pay at 2,871 feet and was bottomed at 2,898 feet; the formation at 2,871-93 feet was shot with 80 quarts and the well made 75 bbls. initial. Prairie Oil & Gas Co.'s No. 57 Johnson Brothers A, Section 20, Block Y, M. & C. Survey, pumped 40 bbls. of oil and 10 bbls. of salt water initially from lime pay at 2,980 to 3,038 feet. Timms and associates' No. 1 T. D. Lewis, Section 5, Block 23, B. S. & F. Survey, east of the McIlroy Pool in southeastern Hutchinson County, was shot with 160 quarts at 2,950 to 3,003 feet; total depth 3,084 feet, and swabbed 75 bbls. the first 24 hours.

Gray County

The 58,000,000 feet of gas at 3,190 feet at British-American Oil Co.'s No. 1 J. E. Meers, Section 107, Block 3, was mudded off some time ago when the well was shut in. When drillers started to complete the well it was found the gas had been lost and the well was abandoned. Empire Gas & Fuel Co.s No. 1 Hood, SW cor. SE, Section 33, Block 3, extended the Gulf-Saunders area 1 mile to the east. The well was shot with 470 quarts at 2,945 to 3,065 feet and swabbed 635 bbls. initial. During the past week the well averaged 280 bbls. daily. In the eastern extended area of the McConnell Pool, Roxana Petroleum Corp.s No. 1 McConnell, NE E half SW Section 174, Block 3, was shot with 270 quarts at 3,183 to 3,264 feet and flowed 557 bbls. the first 24 hours. The well had the first gas at 2,950 feet and 20,000,000 feet at 3,008-30 feet. A showing of oil was found at 3,107-37 feet and at 3,217 feet. The well flowed 58 bbls. from sandy lime at 3,225-45 feet before the shot. Roxana Corp.s No. 2 Worley, Section 39, Block 3, in the Gulf-Saunders area was shot with 240 quarts at 3,012-75 feet and flowed 450 bbls. the first 24 hours. Sun Oil Co.'s No. 1 Worley & Reynolds, Section 83, Block 3, in the Wilcox-Pampa Pool, was temporarily abandoned at 2,870 feet with the tools in the hole.

Motley County

Chechako Oil Co.'s No. 1 J. W. Owens, NW cor. Section 26, Block 4, was dry and abandoned at 3,800 feet.

Roberts County

Charles Page and associates' No. 1 Hamilton, Tract 2, Clay County School Lands, was junked at 440 feet.

NATURAL GASOLINE HIGHER IN OKLAHOMA

(Continued on Page 28)

plete June report will be found elsewhere in this issue. As was shown several weeks ago in the earlier report of The Oil and Gas Journal, Mid-Continent refiners ran more crude to their stills in June than in May. In this connection, attention is called to the August report of refinery runs elsewhere in this issue which shows at the present time Mid-Continent refiners are running more crude to their stills than in any previous period in their history.

This situation does not point to any improvement in the gasoline market. At the same time, the fact that Mid-Continent refiners are absorbing large quantities of crude tends to minimize the possibility of the major crude buyers reducing their price schedules, a development which many are expecting and which of course would also be a weakening factor in the gasoline market.

The table shows that on July 1, Mid-Continent refiners had 6,213,000 bbls. (260,946,000 gallons) of gasoline on hand. A sizeable reduction in stocks was made during June and for the entire refining industry the reduction was approximately 5,000,000 bbls. It will be noted, however, that stocks on July 1 in the Mid-Continent were 537,000 bbls. (22,554,000 gallons) greater than on the same date last year. With a high rate of production in July and a still higher rate scheduled for August, it is apparent that the reduction of storage is as much a price factor in the Mid-Continent as in other refining areas.

Gasolines and Naphtha

Price developments in regard to 58-60 U. S. Motor gasoline have been explained. There was such a wide variance in reports of prices for the higher gravities that it was difficult to arrive at any representative quotation. There was an export inquiry for 64-66 375 during the week. This business was finally placed in North Texas and North Louisiana at a price the equivalent of which in Oklahoma would have been 6½ cents. This is said to have been the lowest priced purchase of aviation gasoline in the history of the Mid-Continent Field.

The usual quotation for 60-62 400 end point in Oklahoma was 6¾ cents and 7 cents for 64-66 375. The grades lower in gravity than 58-60 U. S. Motor were reduced one-eighth to one-quarter cent. Naphthas were available at 6½ cents.

Fuel Oils and Gas Oils

The fuel oil market was similar to that of gasoline. Oklahoma refiners found lower prices necessary if they were to compete with some of the prices offered by refiners outside the group. In the Chicago area fuel oils of 18 to 26 gravity sold as low as 80 cents basis Oklahoma. The Oklahoma operators, however, were not meeting these prices. They were endeavoring to move their output to consuming areas where the freight rate disadvantage was less.

A majority of refiners did not change their quotations during the week. The price range on fuels of 18 to 26 gravity was 85 to 90 cents. There was a fair movement of the low cold test fuels. The higher gravities sold up to $1. One sale of 14 gravity fuel oil was reported at 75 cents for Chicago haul.

Gas oil prices are lower. Considerable material was sold during the week at 2½ cents. Most refiners, however, are asking 2⅝ to 2¾ cents.

Kerosene and Distillates

Most refiners report a "fair" to "excellent" movement of kerosene. Two refiners with their own marketing facilities state they have been agreeably surprised with their retail demand this month. Any attempt to advance prices results in lower quotations from other refiners so that quotations are steady.

No improvement in the distillate movement is reported. Some shipments on contracts have already been made and these shipments will increase later in the month. The spot market, however, is still inactive. According to one refiner, the slump in the fuel oil market has created an impression among many of the buyers that distillate prices will go lower. The greatest demand is for the high-gravity distillates of good color and odor with a flash of 175 or less.

Natural Gasolines

Steady buying in North Texas and Oklahoma from several sources established a price of 5½ cents to 5¾ cents for Grade A and Grade AA, the first of this week. The B grades advanced to a 5⅛ to 5¼ cent spread with Grade C selling at 4¾ to 4⅞ cents. A substantial part of the buying was coming from Gulf Coast refiners including the Gulf Refining Co., Humble Oil & Refining Co. and the Sinclair Refining Co. Most of this business was being placed with the North Texas manufacturers due to the lower freight rates. The buying, however, aided the entire Mid-Continent market.

The North Louisiana refiners were also heavy buyers. Manufacturers reported a steady demand in small shipments coming from the small refiners and jobbers.

The demand for natural gasolines is expected to continue strong for the remainder of the summer and fall months provided the manufacturers do not advance their prices to the point where the refiners will find it cheaper to change their operations so as to reduce the amount of material required for blending purposes. With the present low crude and refinery gasoline prices, it is felt that any additional advances in natural gasoline will tend to reduce the demand.

Lubricants and Wax

The slump in the gasoline market has caused a few refiners and compounders to endeavor to speed up their lub movement with lower prices. A policy of meeting their competition has been adopted by several refiners who otherwise are not changing their quotations. Buyers are making more inquiries for wax with slightly higher prices.

STATE APPROVES SEMINOLE CURTAILMENT

(Continued from Page 33)

Company and Lease—	Potential Prod'n	Production— Allowed	Actual	Over	Short
Independent:					
P. Fixico	450	405	292	.....	113
Harjo	850	765	812	47	.....
Independent-Garland:					
T. Fixico	635	571	740	169	.....
Independent-Interocean:					
Jones	600	540	595	55	.....
I. T. I. O.:					
Goodein	340	306	390	84	.....
Bowlegs	3,300	2,970	3,480	510	.....
Harjo	460	405	438	33	.....
James	1,020	918	1,016	98	.....
Reed	35	32	38	6	.....
Kingwood:					
Harjo	1,835	1,651	1,490	.....	161
Magnolia:					
Franks	1,270	1,145	1,188	45	.....
Mid-Continent:					
Rentie	1,450	1,305	1,545	240	.....
Tayeche	230	207	370	163	.....
Mid-Kansas:					
Jackson	70	63	84	21	.....
Pressly	50	45	15	.....	30
Wilkins	700	630	700	70	.....
Phillips:					
Strothers	300	270	145	.....	125
Philmack:					
Butler	3,900	3,510	3,680	120	.....
Prairie:					
Gross	60	54	60	6	.....
Mason	1,050	945	1,020	76	.....
Spencer	20	18	15	.....	3
Strothers	1,600	1,440	725	.....	715
Pure Oil Co.:					
Strothers "A"	3,000	2,700	2,819	119	.....
Strothers "B"	4,100	3,690	3,793	103	.....
Strothers "C"	180	162	132	.....	24
Roxana:					
Harbor	360	324	364	40	.....
The Texas Company:					
Strothers	140	126	35	.....	91
Roxana:					
Lasley	160	144	71	.....	73
Sinclair:					
Carter	35	31	30	.....	1
Cudjo "A"	1,260	1,134	1,195	61	.....
Cudjo "B"	630	567	445	.....	122
Dicey	530	477	690	213	.....
Fixico	670	603	560	.....	43
Slick:					
Cudjo	1,100	990	881	.....	109
Franks	2,000	1,800	2,004	204	.....
Giblet	1,300	1,170	1,312	142	.....
Superior:					
Cudjo	800	720	859	139	.....
The Texas Company:					
Butler	270	243	80	.....	163
Tidal:					
Carter	1,750	1,576	1,605	30	.....
Fixico	520	468	405	.....	63
D. Harjo	1,200	1,080	1,090	10	.....
T. Harjo	220	198	230	32	.....
Mahardy	1,000	900	915	15	.....
Tayeche	648	583	0	.....	583
Turman:					
Cudjo	1,370	1,233	1,053	.....	180
Grisso	320	288	313	25	.....
Jones	1,400	1,260	1,233	.....	27
Total	85,294	76,762	77,709	4,917	3,970
Searight Pool					
Carter:					
Davis	5,600	5,040	5,130	90	.....
Frazier	6,900	5,310	5,470	160	.....
Kiker	35	31	30	.....	1
Scott	40	36	35	.....	1
Gypsy:					
Cudjo	1,100	990	1,327	337	.....
Mid-Continent:					
Grayson	2,400	2,160	1,970	.....	190
Saloche	1,610	1,449	1,380	.....	69
Prairie:					
Cannon	20	18	20	2	.....
Carter	10	9	10	1	.....
Houck	10	9	5	.....	4
Kincaid	1,920	1,728	1,890	162	.....
Weimer	25	23	25	2	.....
Pure:					
Aldridge	6,850	6,165	5,753	.....	410
Roxana:					
Strothers	2,500	2,250	2,674	424	.....
Sinclair:					
Polly	2,000	1,800	1,885	85	.....
Twin States:					
Cudjo	925	832	945	113	.....
Wilcox:					
Chupco	2,340	2,106	2,466	360	.....
Total	33,285	29,956	31,017	1,736	675
Bowlegs Pool					
Amerada:					
Rasco	9,000	8,100	8,395	295	.....
Atlantic:					
Baker	1,600	1,440	2,284	844	.....
Fleet	2,000	1,800	2,719	919	.....
Grayson	2,700	2,430	2,809	379	.....
Jones	330	297	280	.....	17
Barnsdall:					
McNac	80	72	75	3	.....
Murrow	800	720	760	40	.....
Carter:					
Bowlegs	2,900	2,610	2,835	225	.....
Harjoche	4,500	4,050	4,280	230	.....
Hilly	2,050	1,845	2,100	255	.....
Walker	1,500	1,350	1,400	50	.....

Company and Lease—	Potential Prod'n	Production— Allowed	Actual	Over	Short
Wise	10,500	9,450	10,245	795	.....
Empire:					
Lacey	2,852	2,567	2,877	310	.....
Gypsy:					
Brown	80	72	80	8	.....
Walker	3,850	3,465	4,055	590	.....
Wise	120	108	120	12	.....
Independent:					
Coker	750	675	805	130	.....
I. T. I. O.:					
Barnett	2,250	2,025	2,179	154	.....
Billington	2,100	1,890	2,056	166	.....
Bowlegs	7,100	6,390	7,108	718	.....
Davis	2,700	2,430	2,749	319	.....
Faye	2,150	1,935	1,929	.....	6
Goforth	6,400	5,760	5,967	207	.....
Livingston	17,500	15,750	16,301	551	.....
Lizzie	600	540	586	46	.....
Walker	6,600	5,940	5,946	6	.....
Wilmont	4,200	3,780	4,213	433	.....
Work	1,160	1,035	877	.....	158
Youngblood	1,400	1,260	1,388	128	.....
McCullough:					
Bowlegs	910	819	800	.....	19
Mid-Continent:					
Baker	5,300	4,770	5,049	279	.....
Bowlegs	1,400	1,260	1,404	144	.....
Hutke	60	54	45	.....	9
Minnehoma:					
Bowlegs	3,900	3,510	3,601	91	.....
Prairie:					
Gahagan	2,100	1,890	1,930	40	.....
Harbor	7,300	6,570	7,090	520	.....
Templeton	3,000	2,700	3,875	1,175	.....
Whitney	2,500	2,250	2,350	100	.....
Pure:					
Reed	18,600	16,740	18,303	1,563	.....
Strothers "E"	20	18	23	5	.....
Roxana:					
Taylor	4,300	3,870	4,402	532	.....
Shaffer:					
Lacey	2,300	2,070	2,312	242	.....
Sinclair:					
Bowlegs	140	126	135	9	.....
Ellen	1,550	1,395	1,440	45	.....
Harjo	3,700	3,330	3,570	240	.....
Jones	5,000	4,500	4,935	435	.....
Taylor	2,950	2,665	3,220	565	.....
Walker	5,000	4,500	4,930	430	.....
The Texas Company:					
Reed	9,000	8,100	7,855	.....	245
Tidal:					
Harjoche	3,200	2,880	3,080	200	.....
Twin States:					
Jones	900	810	900	90	.....
Total	182,892	164,603	178,667	14,518	454
Earlsboro Pool					
Amerada:					
Anderson	4,800	4,320	4,450	130	.....
Cowden	20,700	18,630	20,245	1,615	.....
Barnsdall:					
Bruner	31	28	30	2	.....
Cudjo	30	27	25	.....	2
D. Davis	2,800	2,520	2,851	331	.....
J. Davis	245	220	246	26	.....
M. Davis	440	396	445	49	.....
Gibson	17,200	15,480	15,929	449	.....
Hearn	40	36	41	5	.....
Ingram	540	486	495	9	.....
Pack	2,150	1,935	2,147	212	.....
Peter	1,350	1,215	1,181	.....	34
Sango	120	108	151	43	.....
Sabolka	3,400	3,060	3,410	350	.....
Smith	70	63	52	.....	11
H. Sullivan	430	387	387	.....	.....
Sullivan-Harjo	85	76	90	14	.....
Wasutke	2,900	2,610	1,683	.....	927
Carter:					
Payne	1,700	1,530	1,670	140	.....
Sango	200	180	200	20	.....
Continental:					
Spencer	8,000	7,200	4,890	.....	2,310
Crosby:					
Bryant	6,800	6,120	6,876	756	.....
Empire:					
Edmundson	4,500	4,050	4,127	77	.....
Gypsy:					
Carter	750	675	645	.....	30
Earl	20	18	72	54	.....
McFarland	450	405	375	.....	30
Noble	3,400	3,060	3,035	.....	25
Peter	250	225	140	.....	85
State	1,600	1,440	1,297	.....	143
Strain	12	11	12	1	.....
Independent:					
Bruner	40	36	40	4	.....
Sullivan	100	90	200	110	.....
Knapp	3,400	3,060	3,830	770	.....
O'Dell	10,600	9,540	9,705	165	.....
Interocean:					
Payne	500	450	465	15	.....
Magnolia:					
Bryant	3,500	3,150	5,682	2,532	.....
Edmundson	2,850	2,565	2,554	.....	11
Holmesby	12,000	10,800	11,965	1,155	.....
Ingram	45	40	40	.....	.....
Lena	540	486	401	.....	85
Seay	3,250	2,925	3,305	380	.....
Simpson	80	72	284	212	.....
Sparks	2,750	2,475	2,755	280	.....
Mid-Continent:					
McCumber	8,000	7,200	8,385	1,185	.....
Phillips:					
Dunaway	25	23	0	.....	23
Gram	1,700	1,530	2,692	1,162	.....
Prairie:					
Baker	50	45	40	.....	5
Davis	5,300	4,770	4,880	110	.....
C. Graham	6,300	5,670	5,000	.....	670
O. Graham	3,300	2,970	2,800	.....	170
Stidham	6,500	5,850	7,790	1,940	.....
Roxana:					
Spencer	6,500	5,850	6,633	783	.....
Skelly:					
Spencer	2,500	2,250	0	.....	2,250
The Texas Company:					
Brown	40	36	40	4	.....
Rogers	10,500	9,450	10,985	1,535	.....
Wilmont	200	180	177	.....	3
Tidal:					
Watkins	12,200	10,980	11,390	410	.....
Twin States:					
Barker	4,100	3,690	3,760	70	.....
Hearn	3,700	3,330	3,572	242	.....
Total	195,583	176,024	186,657	17,347	6,814
Summary					
Seminole	85,294	76,762	77,709	4,917	3,970
Searight	33,285	29,956	31,017	1,736	676
Bowlegs	182,892	164,603	178,667	14,518	454
Earlsboro	195,583	176,024	186,557	17,347	6,814
Total	497,054	447,345	473,950	38,518	11,913

WELLIVER RESIGNS FROM INSTITUTE; NOW EDITOR OF PITTSBURGH PAPER

Judson C. Welliver has resigned as director of public relations of the American Petroleum Institute to become editor of the Pittsburgh Post-Gazette. He assumed his new duties on August 2. Mr. Welliver was chosen to direct the public relations work of the petroleum industry in 1925. Previously the industry, through its various associations, had decided in favor of establishing this work and Mr. Welliver was chosen after an exhaustice search had been made for a man to fill the position.

Mr. Welliver is a widely known newspaper man. In the newspaper field he has been active in many cities, including New York and Washington, and also in London during the World War.

At the time of Warren G. Harding's front porch campaign for the presidency at Marion, Ohio, Mr. Welliver was selected by Mr. Harding to direct his campaign, and later when Mr. Harding entered the White House, Mr. Welliver served as spokesman. He continued in this capacity with President Coolidge until 1925.

Mr. Welliver has established the public relations work of the American Petroleum Institute and his material and articles have received wide attention, as well as his addresses made on several occasions. Through his work he enjoys a considerable acquaintance in the oil industry.

Mr. Welliver's new post comes with the consolidation of several Pittsburgh newspapers. The publications involved were the Pittsburgh Post and the Gazette-Times, morning, and the Pittsburgh Sun and the Chronicle-Telegraph, afternoon. These four have been merged into one morning newspaper, published by Paul Block of New York, and called the Post-Gazette, and one evening paper, published by William Randolph Hearst, called the Sun-Telegraph. Mr. Welliver takes over the editorship of the Paul Block publication.

The American Petroleum Institute, in announcing Mr. Welliver's resignation, said: "Mr. Welliver received an offer

Judson C. Welliver

which he did not feel he could decline with justice to himself and family. It is a matter of regret that the institute should have lost his service. Mr. Welliver has the best wishes of the institute's authorities in his new work."

EXPOSITION TO STRESS IMPORTANCE OF AVIATION

Aviation has assumed a dominant place in the plans for the International Petroleum Exposition to be held in Tulsa September 24 to October 1. Fuel and lubrication for airships is already a considerable business for Mid-Continent refiners and producers and there is every indication of a general increase in consumption from that source. Col. Charles A. Lindbergh will be one of the notables to attend the oil show. Col. John A. Paegelow, army flier and an authority on aviation, is to be a guest of the city and the exposition.

Officials of a number of oil companies will come to Tulsa in airplanes. The first announcement came from the chairman of the board of the Standard Oil Co. of Indiana, Col. R. W. Stewart, who will be one of the nine official passengers on the "Stanolind," which is to come direct from Chicago. Three other oil companies have announced official flying trips to the exposition.

A highly important test of gasoline for airplanes is to be made in Tulsa during the exposition period, according to M. H. Kotzebue, a former army air man and now a Tulsan who flies habitually. The tests will include all the varieties of gasoline used in aviation. The test will be under the auspices of the Tulsa chapter of the National Aeronautic Association.

AUTHORITY TO GRANT PRISON LAND LEASES

AUSTIN, Tex., Aug. 6.—Oil and gas exploration on state prison lands is attracting attention and Attorney-General Claude Pollard has been asked who has the legal right to make leases on the state prison farms.

A change has come through the law enacted by the Fortieth Legislature creating the State Prison Board and giving the board control over the state prison system. The act does not give the board the right to buy or sell land.

The question arises whether oil and gas leases on prison lands may be made by the prison board or by the State Land Commissioner.

Technical Questions Answered

BY CHARLES K. FRANCIS, PH.D., TECHNICAL EDITOR

The Question and Answer Department of The Oil and Gas Journal is devoted to the manufacturing branches of the oil industry. Those connected with the refining of crude petroleum, the manufacture of natural gasoline and closely allied industries are invited to submit their problems to Dr. C. K. Francis, technical editor. The department was created for the purpose of aiding managers, superintendents, engineers, chemists and all those engaged in the various phases of plant operation; also those connected with the marketing and utilization of petroleum products.

Questions should be submitted in as much detail as possible so as to assure a satisfactory answer.

All inquiries should be signed and if other than the given initials are to be used please indicate the desired letters.

Questions involving patented processes, intricate formulas and calculations and estimates of costs, for obvious reasons, cannot be answered. The replies will appear on this page within a reasonable time.

CONSUMPTION OF NATURAL GAS

Can you tell me how much natural gas is used in the United States per year and in how many states it is distributed?—J. T.

There were consumed last year about 1,200,000 million cubic feet of natural gas. This volume is approximately three times larger than the quantity of artificial gas consumed. The money paid for artificial gas is a little more than double the sum paid for natural gas.

Natural gas is distributed in 19 states. The largest quantity handled is over 83.7 thousand million cubic feet in Ohio, and the smallest about 4,000,000 cubic feet in South Dakota. These quantities are based on the figures of the United States Bureau of Mines for annual consumption.

REMOVAL OF SULPHUR AND ELIMINATION OF CORROSION

Can you give me some information relative to the best method to date for the removal of sulphur and the elimination of the corrosive action of West Texas crude preparatory to refining?—W. T. B.

So far as we are informed, no method has been perfected which will remove sulphur, together with other objectionable substances, and eliminate the corrosive action of such oil as is produced in the western area of Texas. All that can be said about the results of numerous investigations is that progress has been made in improving refining conditions so that corrosion troubles have been reduced over what they were when the first oil from this field was run.

At ordinary temperatures water will take up about 2.5 volumes of hydrogen sulphide and advantage is taken of this fact when storing this oil. Some of the sulphur may be removed when the oil is stored over water. Attempts to remove sulphur and salt by spraying with water have not met with success; probably because sufficient contact could not be obtained under the working conditions and enough water was not available. The greater part of the hydrogen sulphide in the oil seems to be lost in storage without special treating.

Better results are claimed to have been obtained by some refiners when no steam is introduced into the still. This practice is explained by the theory that water is necessary for the decomposition of the salts and the conversion to acid. In the absence of water no acid can be formed.

Settling of the oil at slightly elevated temperatures appears to give good results. Enough heat is used to cause a breaking down of the oil or wax film, which surrounds the particle of salt and water, so that no separation is accomplished. The arrangement and design of the settlers is important to the success of this method. Some refiners are adding caustic soda to the oil while it is passing through the settlers.

The introduction of ammonia into the stills, vapor lines, or towers produces good results in the prevention of corrosion.

LUBRICATING OIL FOR ELECTRICAL SWITCHES AND CIRCUIT BREAKERS

It will be appreciated if you will supply us with complete specifications for lubricating oil which is to be used in oil switches and circuit breakers?—S. E. C.

The following are from the United States Government specifications. Technical Paper 323A, page 24:

Flash—290 degrees Fahrenheit.

Viscosity at 100 degrees Fahrenheit—95 to 110 seconds, Saybolt.

Pour point—20 degrees Fahrenheit.

Acidity—Not more than 0.10 mg KOH shall be required for one gram.

Heat test—No deposit or darkening when heated to 450 degrees Fahrenheit.

Corrosion test—Copper strip shall not show discoloration after three hours at 212 degrees Fahrenheit.

Breakdown test—Not under 23,400 volts.

Unsaturation—Not more than 4 per cent soluble in sulphuric acid.

More complete specifications have been prepared by the British Engineering Standards Association, from which the following is quoted:

The specification is a revision of a tentative specification for oils in use in transformers, oil switches and circuit breakers. The classification is based on the sludging properties of the oils and each class is further subdivided into grades on the basis of cold test. Oils should be selected according to the cold test required. Oils for use in unusually cold places should be selected from Class A. 30 or B. 30. Class A oils, sometimes referred to as nonsludging oils, are suitable for use in transformers in which the working temperature of the oil exceeds 176 degrees Fahrenheit. They are also suitable for use in oil switches of over 500 amperes capacity, having their main contacts under oil and operated for long periods and in hot places. Class B oils are suitable for use in transformers at temperatures not exceeding 167 degrees Fahrenheit. They are also suitable for use in oil switches not requiring use of Class A oils.

The oil in each class shall be pure mineral oil, clean and sufficiently free from moisture, or other matter likely to injure its insulating properties, to satisfy the requirements of this specification. The characteristics, when tested in accordance with the methods described in the report, shall be within the limits shown in the following schedule:

Class of Oil	Sludge max.) Per cent	Viscosity at 15°C. (max.) Redwood Secs.	Electric Strength (min.) Volts	Flash point (min.)	Evaporation (max.) Per cent	Cold Test (max.)
A.O.	0.1	200	30,000	293°F.	1.6	32°F.
A.10						14°F.
A.30						—22°F.
B.0	0.3	200	30,000	293°F.	1.6	32°F.
B.10						14°F.
B.30						—22°F.

No limits are assigned to the specific gravity in this specification, since it is not considered that the specific gravity is important as affecting the utility of the oil for the purposes of this specification. The oil shall not contain any inorganic acid. The acid value per gramme of oil due to organic acids shall not exceed 0.2 mg. KOH when tested in accordance with the report. The saponification value per gramme of oil shall not exceed 4 mg. KOH when tested in accordance with the standard method. The oil shall not cause discoloration of copper when tested in the prescribed manner.

AIR OR WATER FLOODING SHALLOW PRODUCTION

We are producing some heavy oil at about 100 feet and have 20 to 25 feet of saturated sand. Could this production be increased by the use of air or by the soda ash solution for flooding? Would the use of the soda ash in any way affect the quality of the oil?—G. B.

It is possible that either method would give you increased production without injury to the oil. There are so many factors involved that it is necessary for you to have the advice of someone who is familiar with the local conditions.

As a general rule the gas or air plants are arranged so that one plant will serve about 40 acres, but with your shallow sand it may be possible to operate as much as 160 acres from one plant. The pressure which it will be necessary to develop will be governed by the character of the sand. Water supply and slope of the land will have to be considered in addition to the type of plant necessary.

The soda method has not been in use long enough for us to arrive at a definite conclusion concerning its value. The United States Geological Survey has suggested that under some conditions the sodium carbonate (soda ash) solution may be harmful, by causing the deposition of lime carbonate. Experiments should be made with care and under the supervision of trained experts who should collect and study numerous data concerning structural, sand and water conditions in the particular field. The character of the oil, rate of movement of oil, gas and water in various directions through the sand. The rate of yield of oil and water from individual wells before and after flooding was started, and the rate at which soda solution, of known strength, is being introduced in the inlet wells.

HUMIDIFICATION OF THE MOTOR FUEL

Is there any real technical information in existence on the value of humidification of the gas used by automobile and tractor engines? Can you tell me positively whether or not humidification is beneficial? Does it eliminate or prevent carbon? Does it aid lubrication? Does it save fuel?—W. F. S.

We do not know of any published information on this subject. Water behaves, when added to the fuel charge, as a weak antiknock material. To accomplish any real practical result it is necessary to add an equal amount of water as the fuel being used. Obviously this is out of the question to accomplish commercially because in the first place the water would have to be distilled water or lime deposits would occur in the cylinder which is detrimental to continued operation. Secondly, during winter months some antifreeze material would necessarily have to be added to the water which would make the cost of the water and antifreeze solution equal to the cost of the fuel.

From the above you will realize that such devices as drawing a small amount of air from the top of the radiator will produce such an infinitesimal quantity of water that no noticeable improvements would be obtained and this is precisely the status of such processes. It may seem surprising but calculation will reveal that on damp evenings the air contains the amount of water equal to the fuel used in a combustible mixture and consequently very delightful results are obtained under these conditions. The use of water does not eliminate or prevent carbon formation, nor does it aid lubrication or save fuel, it merely acts when present in sufficient quantity, as an antiknock material which is impractical of commercial reduction to practice.

It is probably true that injecting water in fairly large quantities into the intake of an engine while hot, will to some extent remove carbon deposit. It is almost equally certain that when using a small quantity of water, as is often the practice, and in which case the volume of water is far less than the volume of fuel, will have no appreciable effect on carbon or on the general operation of the engine.

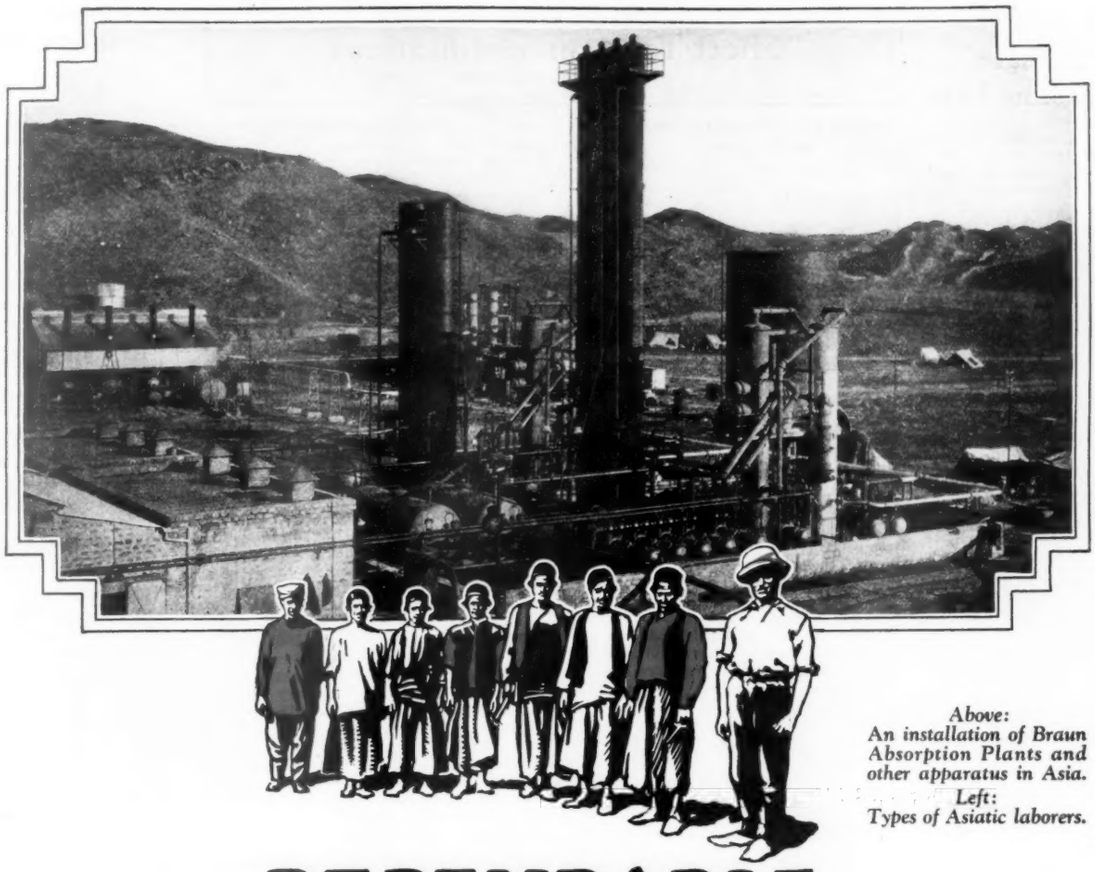
HEATING VALUE OF FUEL OIL

Will you kindly give me an outline of the method and the instruments used for determining the heating value of fuel oil? —E. L. S.

The heating value, or calorific value, of any substance, including fuel oil is determined by means of a special instrument known as a calorimeter. The principle essential to the determination is the actual measurement of the heat of combustion. A definite quantity of the substance is burned under conditions which permit the heat to be absorbed in a fixed quantity of water and the change in temperature is noted. There are two kinds of calorimeters used for determining the heating value of oil. In one the material is placed in a bomb and the bomb filled with oxygen under pressure; in the other sodium peroxide, a substance rich in oxygen, is used to aid the combustion. The oxygen calorimeters are more expensive than the sodium peroxide type.

Space is not available for complete descriptions of both instruments but the following is an outline of the determination as made by the sodium peroxide bomb calorimeter.

The oil, about 0.2 gram, is weighted into a small metal cup, then mixed with the chemicals and placed in the bomb. The bomb is closed. The bomb, equipped with stirrers, is placed in the measured water and both set into an insulated vessel. The bomb is revolved by means of a motor and thus causes even distribution of the heat. When the temperature of the water becomes uniform, as shown by the thermometer which is suspended in the water, the charge in the bomb is set off by means of a current of electricity flowing into a fuse wire connection placed in the bomb. The stirring is continuous and the temperature is recorded at the end of each minute until a maximum has been observed. After allowing for the heat derived from the chemicals and the water equivalent of the instrument, it is possible from the rise in the temperature to calculate the heating value. This is usually expressed in calories or more commonly, British thermal units, B.t.u.



Above:
An installation of Braun Absorption Plants and other apparatus in Asia.
Left:
Types of Asiatic laborers.

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Of Interest to Sales Departments

Exports of Motor Vehicles Increase With Gasoline Less

Although exports of gasoline from refineries in United States the first five months of this year showed a decrease under the exports of the same period last year, automobile manufacturers had an increase of 25 per cent in their sales to foreign customers. The data which have just been released by the Automotive Division of the Bureau of Domestic and Foreign Commerce show that a total of 220,115 motor vehicles were exported by manufacturers the first five months of this year.

Previous reports of the Bureau of Mines showed that a total of 18,402,000 bbls. of gasoline were exported the first five months of this year, a decrease of 84,000 bbls. under the same period of 1926. These data indicate that the American refiners are not increasing their foreign sales of gasoline in line with the greater consumption brought about by the increased number of motor vehicles in use.

The rate of increase of cars exported over the first five months promises to hold over the entire year despite the strong competition offered by some of the foreign countries coupled with adverse tariffs. Australia continues to be the principal importer of American passenger cars and although it has not shown the percentage increase some of the other countries have shown it is improbable that it will be surpassed for some time. The United Kingdom has shown the greatest increase on a percentage basis, the imports of American cars growing from 2,775 during the first five months in 1926 to 9,910 during the same period this year.

Australia Large Importer

Australia is also the principal importer of American trucks and takes more than the next three highest users combined. Contrary to the increased imports of American passenger cars into the United Kingdom, the imports of American trucks fell off considerably.

The future for the export trade appears to be exceptionally bright and over the next five years sufficiently definite plans have been outlined by many of the important foreign commercial and civic organizations to allow automobile manufacturers in the United States to devote more attention to the development of foreign branch sales facilities. Included in these plans the Light and Power Co. of Sao Paulo, Brazil, contemplates an expenditure of $10,000,000 for transportation equipment.

England and Italy offer the greatest competition to the American manufacturers and of these England is by far the more important, due largely to the favorable trade agreements she can make with her colonies in the form of preferential tariffs. The competition in Italy and France is due principally to the local financial conditions there in which the depreciation of the currency favors the foreign manufacturers in competition with the American manufacturer. The following table summarizes the exports of cars from the United States and Canada for the first five months:

TOTAL VEHICLES

	1926	1927
U. S. vehicles	142,167	188,606
Canadian vehicles	34,150	31,509
Total	176,317	220,115
Passenger Cars		
U. S. cars	111,076	138,954
Canadian cars	24,367	22,236
Total	135,443	161,190
Trucks		
U. S. trucks	31,091	49,652
Canadian trucks	9,783	9,273
Total	40,905	58,925

Short Talks on Specifications

By Wm. T. Ziegenhain

GASOLINE DISTILLATION TEST

In the previous issue of The Oil and Gas Journal, a brief description of the apparatus and the test procedure used in making a gasoline distillation test were included under this subject. It was said this test showed the proportion of fuel vaporizing at different temperatures. This is essential, for the performance of the motor is dependent upon being supplied with a gasoline containing a balanced amount of low boiling fractions to start the motor readily and afford speedy acceleration, and a maximum of the heavier fractions, that will completely vaporize, to supply maximum power.

But the purpose of the distillation test remains obscure unless the composition of the gasoline is understood. Like all petroleum oils, gasoline is made up of a series of many different hydrocarbons, each having a definite boiling point. Hydrocarbon is the name given any substance made up of only hydrogen and carbon. These two elements are common and appear uncombined. A diamond is carbon in its crystalline form while lampblack and coal are nearly pure carbon in the amorphous form. Hydrogen is a gas at ordinary temperatures and is familiar to most of us as the gas used to fill the toy balloons on circus day to make them lighter than air.

Carbon and hydrogen unite in a definite ratio to form many different hydrocarbons and as examples of this, one part of carbon combined with four parts of hydrogen forms methane gas, the simples hydrocarbon. This is a gas at normal temperatures and requires a temperature of –265 degrees Fahrenheit to liquefy it so it may be said to have a boiling point of –265 degrees Fahrenheit. When two parts of carbon unite with six parts of hydrogen, the resultant product is ethane, also a gas at ordinary temperatures but is much heavier and has a boiling point of –135 degrees Fahrenheit. Similar combinations may be made using say 10 parts of carbon and 22 parts of hydrogen to form decane, a liquid boiling at 343 degrees Fahrenheit. This is a major constituent of gasoline. Hexadecane, a more complex hydrocarbon, is composed of 16 parts of carbon and 34 parts of hydrogen and boils at 549 degrees Fahrenheit. This fraction is too heavy to include in the gasoline and usually goes into the heavy kerosene or gas oil cut.

Thus the simpler hydrocarbons are gases and as the chemical structure of each becomes more complex the compound becomes heavier and less volatile and passes through the stages of being a gas at ordinary temperatures, then very volatile liquids. The very complex hydrocarbons are volatile only at relatively high temperatures. With this discussion as a basis, the next issue of The Oil and Gas Journal will conclude the talk on the gasoline distillation test by correlating the test results and interpret the results with respect to engine performance.

USE NEW GASOLINE IN TRANSPACIFIC FLIGHT

Frank Phillips, president of the Phillips Petroleum Co., has entered a plane in the San Francisco-Honolulu flight for the Dole prize in competition with the plane entered by his company. Mr. Phillips has named his entry the "Woolaroc" the name given to his ranch. It will be piloted by Art Goebel of Hollywood, Calif., who will be both pilot and navigator.

The plane is a duplicate of the one previously entered by the company, being a Travelair monoplane equipped with a Wright whirlwind motor. The trip has been planned to promote aviation and to test the new Phillips airplane fuel under these severe conditions.

It is also planned to have at least one of the planes continue on to Tokyo, Japan, to set a new record for distance. Enough of the new Phillips Petroleum Co.'s motor fuel has already been shipped to Honolulu to supply the plane in this flight. In addition to proving the efficiency of the new fuel and establishing a new distance record Mr. Phillips feels that Japan will receive the American fliers as others were received in the European flights and will tend to promote a closer relationship between these two countries.

Both planes are being assembled in Wichita, Kans., and will start from Bartlesville, Okla., where the main offices of the Phillips company are located.

CITIES SERVICE CO. BUYS

CHICAGO, Aug. 6.—The Cities Service Co., has purchased the Kahler Oil Co. of Wilmington, Ill., and will continue the business.

NEW SALES MANAGER OF PIERCE PETROLEUM

ST. LOUIS, Mo., Aug. 6.—W. E. McEwen, who has taken over his new duties as manager of sales for the Pierce Petroleum Corp. with headquarters in this city, is widely known in marketing circles of the Middle West. Early this year he resigned as vice president of the National Refining Co. after many years service with that company.

He started as office boy with that company and at the time of his resignation was in charge of the company's marketing which includes service and bulk station facilities in several states. In his new work, Mr. McEwen will direct the retail and wholesale distribution of refined products for the Pierce corporation.

OPENS NEW STATIONS

CHICAGO, Aug. 6.—The Indian Refining Co. of Lawrenceville, Ill., has recently opened a number of new service stations. Included in the list are Kokomo and LaPorte, Ind., Paducah and Louisville, Ky., Sturgis and Coldwater, Mich.

BUILDS NEW TYPE STATION

CHICAGO, Aug. 6.—The Standard Oil Co. of Indiana has just opened a new service station at 6600 Sheridan Road that is distinctly different from the former type built by this company. It is of white tile, slightly ornate in design and very attractive, making a much more striking appearance than the former standardized design of dark brick with a roof of only slightly lighter shade.

WAYCO PRESIDENT TO ATTEMPT WORLD FLIGHT

E. F. Schlee, president of the Wayco Oil Corp., Wayco Fuel Oil Co. and the Wayco Air Service Inc. of Detroit, will start about August 11 in the first attempt to completely encircle the globe by airplane. He will also attempt to lower the 28 day time established by the "Round the World" fliers last year, but as a portion of their trip was not covered by plane Mr. Schlee has the chance of making this trip the first around the world flight.

A maximum of 500 gallons of gasoline can be carried, with a regular cargo of about 380 gallons. Schlee and Brock are being assisted in their plans by both the Shell and the Valvoline companies who are arranging to refuel the plane along its route. An emergency engine will be sent to Tokio and probably other points, but the fliers hope to complete the trip, which will total between 19,000 and 20,000 miles, with the original Wright whirlwind motor.

PHILLIPS GASOLINE OUTPUT INCREASING

The Phillips Petroleum Co., the first six months of 1927, manufactured 90,152,133 gallons of gasoline, an increase of 17 per cent over the 77,121,362-gallon production for the first half of 1926, according to the semiannual report of the company just announced. This is the largest production of any single company in the natural gasoline business. The company sold 52,644,830,000 cubic feet of gas the first half of 1927, an increase of 77 per cent over the 29,752,318,000 cubic feet sold the first half of last year.

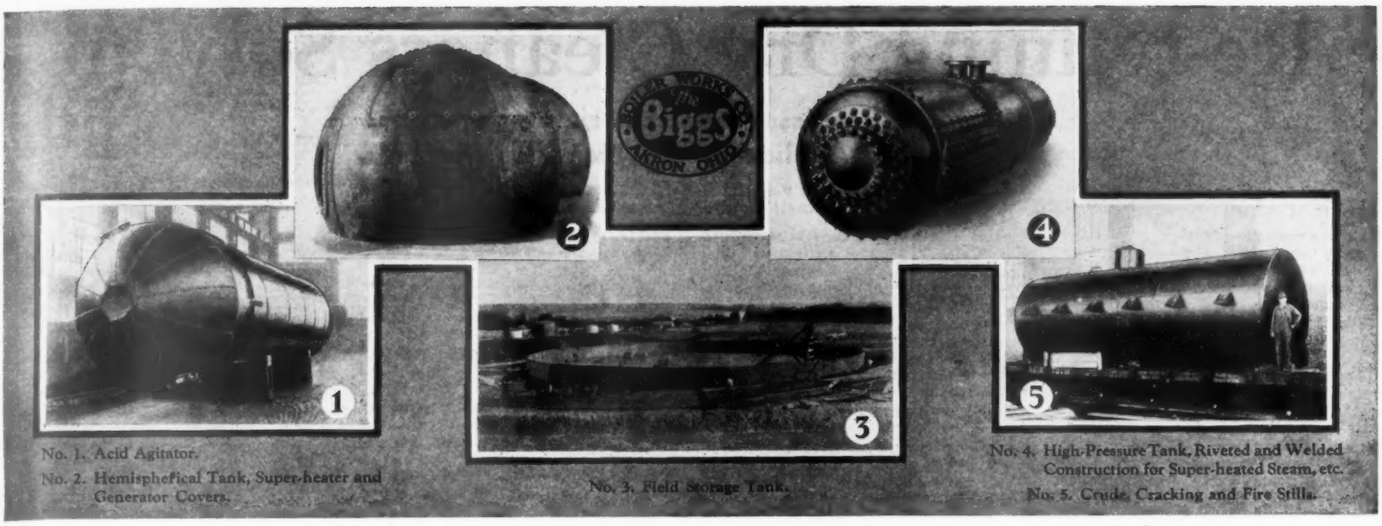
Regarding the sale of its natural gasoline output the company states that over 60 per cent of its natural gasoline is sold under contracts which extend into 1928. The company has contracted for an additional 25 per cent of its output to a major buyer. This contract extends over a year. The remaining gasoline is to be manufactured into special products. The company last week announced special gasolines suitable for automobiles and airplanes.

CORN BORER OIL

CHICAGO, Aug. 6.—Earlier in the season the Department of Agriculture contracted for 80 cars of distillate to be used in the fight against the corn borer in Indiana, Illinois and Wisconsin chiefly although deliveries were specified to other points in the Middle West. When the exterminating squads reached the fields they found that in places the farmers had cleared the fields and planted their seed so that the oil could not be used in such localities. Part of the contract was cancelled. The department has advices of the continued activities of the corn borer in various parts and plans a more extensive campaign next season and will purchase oil accordingly. The material is a 38-40 distillate or an oil that will burn completely leaving no drip to damage the soil. Bids will be asked in due season. The contract this year was taken by the Fuel Oil Corp. of Detroit.

NEW ARGENTINA OIL BILL

The Chamber of Deputies has begun debate on a bill to nationalize oil lands of Argentina. Political circles doubt if the bill will be passed. Provincial governments are opposed to it because it would take jurisdiction of present petroleum lands out of their hands.



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TANKS AND GENERAL
STEEL PLATE WORK
for the Oil Industry

Re-refining Dry Cleaners Solvent

Chemical Processes for Decolorizing by Various Methods of Application. Problems Encountered

By Alan E. Flowers, Ford H. McBerty, and Melvin A. Dietrich*
The De Laval Separator Co., Poughkeepsie, N. Y.

The dry-cleaning industry is a large consumer of petroleum products whose problems appear to have received little attention from petroleum technologists. This industry now does a gross business of about $150,000,000, and consumes about 100,000,000 liters (30,000,000 gallons) of petroleum annually in the cleaning operation. On the average 0.5 kilogram of "solvent" is consumed for each kilogram of goods cleaned. There are approximately 4,000 dry-cleaning establishments in this country, ranging in size from the large "wholesalers," who clean 1,500,000 kilgrams or 1,000,000 or more "suit-equivalents" per year, to the small "retailer" cleaning only a few thousand kilograms annually.

Dry-cleaning consists essentially in washing textiles in a suitable nonaqueous "solvent." So-called "wholesale" cleaners obtain their work chiefly from tailors and others who do not have their own dry-cleaning equipment. The "retailer" deals directly with the individual customer. In order to render the results more easily understood, the "suit-equivalent," equivalent to 1.5 kilograms (3.3 pounds) of textiles to be cleaned is a convenient unit, this being about the average weight of a man's three-piece suit. The articles submitted for dry-cleaning range from gloves to carpets, and it is not customary to weigh the goods cleaned.

In the process of dry-cleaning which is almost universally used in this country, the goods are washed with gasoline in a laundry type washer. Most of the excess solvent is then "extracted" by centrifugal force, and finally the last portion of the solvent amounting to about 20 per cent of the dry weight of the goods, is evaporated by the use of air at about 80 degrees Centigrade (180 degrees Fahrenheit) in a drying tumbler. Many cleaners add some type of dry-cleaner's soap to the solvent in the washer. Others add ammonia, mixtures of dry-cleaner's soap and ammonia, or even water.

Solvent Characteristics Required

Petroleum hydrocarbons used for dry-cleaning should conform to the following general requirements:

1. The solvent should not affect the strength, flexibility, smoothness, or luster of the textile fiber.
2. The solvent should not alter the dyestuffs used.
3. The solvent should not be injurious to plant workers.
4. The solvent should have a high initial boiling point to minimize evaporation losses and particularly the fire hazard.
5. The solvent should have a reasonably low endpoint to facilitate the removal of the last traces of solvent in drying.
6. The solvent should be free from colored or odorous constituents and from suspended solids or moisture which might be retained by the goods.

The first three of these requirements are apparently filled by any of the properly refined petroleum distillates. Although these solvents can hardly be called nonpoisonous, they probably have as little effect on the human system as any available nonaqueous solvent.

The requirements of high initial point and low endpoint are not met by ordinary motor gasoline, which is the solvent in most general use at the present time. An effort is being made by the National Association of Dyers and Cleaners to promote the use of the so-called Stoddard type solvent, which reduces evaporation losses and fire hazard without sacrificing ease of drying. This type of solvent has a flash point (Cleveland open cup) between 40.6 degrees and 43 degrees Centigrade (105 degrees and 110 degrees Fahrenheit), and users of solvent having a flash point above 100 degrees Fahrenheit (37.8 degrees Centigrade) are at present exempted from compliance with the New York State Labor Department Code. The difference between this type of solvent and the usual winter grade of motor gasoline is clearly shown by the distillation curves (Figure 1) for the two solvents before and after the weathering which occurs during use in a dry-cleaning system.

The evaporation loss when using the Stoddard type of solvent is so much lower than when motor gasoline is used for cleaning that this alone more than compensates for the slightly higher price charged for the Stoddard type of solvent.

Solvent Contamination

The removal of dirt, moisture, and color from the solvent and the elimination of any odor which might be retained by the goods are the dry-cleaners' most difficult problems. Until the advent of continuous centrifugal solvent clarification it was considered satisfactory to wash in contaminated solvent, relying on rinsing at least the light-colored goods in cleaner solvent to prevent discoloration. The modern cleaner demands that the solvent in the washer be dry, fairly clean, light-colored, and free from objectionable odor at all times; and further that the solvent condition at the end of the washing period be such that no rinsing is needed.

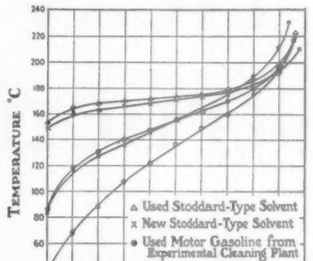

Fig. 1—Distillation curves for new and used dry-cleaning solvents.

The dirt picked up by cleaners' solvent is, of course, derived entirely from the goods cleaned. On the average, 100 kilograms (65 suit equivalents) of goods yield 1.6 kilograms of dry solid dirt. The goods also contain considerable amounts of dark-colored substances which dissolve in the cleansing solvent. The extent of such contamination is shown by the following test, which indicated that 100 kilograms (65 suit-equivalents) of average goods contained about 1.8 kilograms of high-boiling substances soluble in the cleansing fluid:

Eighty kilograms of clothing were washed in about 300 liters of Stoddard type solvent. The initial color of the solvent was 10.* Dirt (1.5 kilograms dry basis) was removed from the solvent by continuous circulation through a centrifugal clarifier. At the end of the washing operation the color of the dirt-free solvent was 100. One-liter quantities of this solvent before and after use were steam-distilled at 100 degrees Centigrade. The heavy ends left in the flask had the following characteristics:

	Before washing goods	After washing goods
Volume heavy ends, cc.	10	16
Neutralization value, mg. KOH per gram (A. S. T. M.)	0.7	6.6

The presence of small amounts of suspended solids or even of "dirt" in the cleansing fluid is not necessarily objectionable. Even fine white silks may safely be washed in solvent containing appreciable amounts of dirt, if no free moisture is present. If, however, the solvent contains as little as 0.1 per cent (by volume) of free water, a large part of the dirt and moisture is picked up by the goods, causing spots and general discoloration. The importance of guarding against the presence of free moisture in the cleansing solvent, which may contain a trace of dirt, cannot be too strongly emphasized.

Tests made in this laboratory indicate that the large amounts of unsaturated hydrocarbons contained in present-day motor gasoline may be responsible for some of the color and odor formed when this solvent is used. The varnish-like odor which such a solvent may develop is particularly objectionable, since it is retained by the goods after drying. This cannot be completely eliminated by distillation or by treatment with alkaline solutions, activated carbon, or combinations of these. Both color and odor, however, can be removed by suitable treatment with concentrated sulphuric acid.

The new Stoddard type solvent is practically free from unsaturated compounds, and does not appear to develop appreciable amounts of either color or odor spontaneously, even when exposed to air in the presence of alkalies. The results of an examination of a 1926-27 winter motor gasoline and of a Stoddard type dry-cleaners' solvent by the method of Egloff and Morrell follows:

ANALYSES OF STODDARD SOLVENT AND MOTOR GASOLINE†

Hydrocarbon	Stoddard solvent	Motor gasoline (1)	Motor gasoline (2)
Unsaturates	0.5	6.5	7.0
Aromatics	7.3	7.2	4.4
Naphthenes	4.7	28.7	22.4
Paraffins	87.5	57.6	66.2

†Gasoline samples were purchased from local dealers and were not redistilled before analyzing.

Removal of Solvent Contamination

The removal of suspended solids and moisture from used cleaners' solvent is not particularly difficult. The centrifugal clarifier does this cheaply and effectively. Agglomeration by mixing with alkali solutions followed by gravity settling is another time-tried procedure, which, however, necessitates the provision of settling tanks holding 20 to 50 times the amount of solvent actually used in the washer, if serious accumulation of dirt in the cleansing fluid is to be avoided. Filtration is used to some extent in Europe, but because of the slimy nature of the solids to be removed and the necessity of minimizing solvent loss, this method would seem to be less desirable than either of the others. The Hele-Shaw "edge filter" has been recommended for this service.

The problem of the removal of color and odor is much more complex than is that of the removal of suspended dirt and moisture. White cotton or silk goods cleaned in solvent of a color of 60 or more may show a slight yellow discoloration after drying. To avoid the possibility of such discoloration, a solvent color of less than 50 should be maintained for washing such goods. Although pure white goods represents only a small portion of the work handled by the average cleaner, the practice of using very dark colored solvent, even for dark goods, is rapidly becoming obsolete. This is probably due in part to the fact that dark-colored solvent (at least if this was originally motor gasoline) is likely to have a varnish-like color, which is very difficult to remove from the goods in the drying operation.

Distillation is perhaps the most obvious means for purifying contaminated solvent, and has found wide application in this field. Batch distillation by the use of open steam appears to be the accepted procedure, probably because of the rather high finishing temperature, which makes the use of steam in coils impractical, and because of the necessity of minimizing fire hazard and odor in the distillate. Laboratory tests indicate that steam distillation under average dry-cleaning plant conditions will cost at least 5 to 10 mills per liter for steam, cooling water, and solvent loss, depending on the type of solvent in use and the degree of contamination. Distillation cannot eliminate volatile substance, nor does it remove the varnish-like odor commonly found in used motor gasoline, and the distilled solvent may also contain substances which cause it to cling tenaciously to traces of moisture after separation.

Batch vs. Continuous Contamination Removal

Until the present decade, batch treatment of solvent to eliminate accumulated contamination was the accepted practice. Under these conditions the contaminating substances are contained in a relatively small volume of solvent, and a fairly high unit cost for reclaiming the solvent may be permissible and is apparently unavoidable. For this type of work steam distillation has so far been able to compete with proposed chemical processes for color and odor removal, particularly because of the simplicity of the process and apparatus involved.

In the modern cleaning plant the accumulation of large amounts of color, etc., in the solvent is no longer tolerated. While the cleaner who relies on the batch method of contamination removal may continue to use the cleansing fluid until its color has reached 250 or more, the cleaner who operates a continuous system for the removal of solvent contamination uses a solvent whose color varies only between the limits of about 20 to 60. The continuous removal of solvent contamination has numerous advantages from the point of view of the dry-cleaner, as well as from that of his customers, and the use of continuous clarifying and decolorizing systems of one type or another for handling cleaners' solvent is rapidly becoming well-nigh universal in this country.

The problem of continuous removal of color and odor from cleaners' solvent is fundamentally different from that of batch removal of such contamination. The system for continuous removal of color and odor receives solvent from the washer at a color of 60 or less and removes part or all of this color content before returning the solvent to the washer. It must therefore handle many times the volume of solvent that would be handled by a batch system washing the same quantities of goods. Under these conditions the cost of processing a liter of solvent must be very low indeed, and should preferably vary with the amount of contamination removed from the solvent during its flow through the processing system.

Steam distillation, at least with the type of equipment now used by dry-cleaners for distilling batches of dirty solvent, is far too costly for use as a continuous decolorizing process. It is also seriously handicapped by the fact that just as much steam and cooling water is required for distilling a liter of water-

*Before Division of Petroleum Chemistry, meeting of the American Chemical Society, Richmond, Va. Reprinted from Industrial and Engineering Chemistry, official publication of the American Chemical Society.

*Note—In this paper, solvent colors are given in terms of the free iodine concentration (milligrams per liter) in an aqueous iodine—potassium iodide solution of equal color appearance. The solutions used contained two parts of potassium iodide for each part of iodine. Such solutions fade on standing, even in sealed tubes, and must be prepared the same day they are used.

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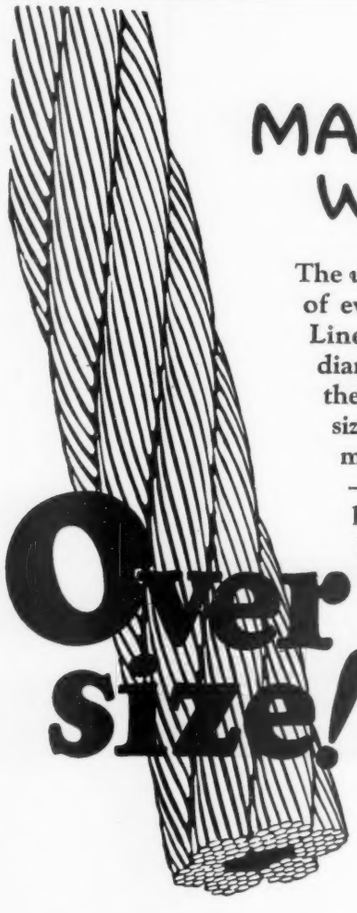

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white solvent as is required for reclaiming a liter of solvent of color 500.

Chemical Processes for Solvent Decolorizing

Certain chemical processes conform more or less to the above requirements for a satisfactory treatment for the removal of low color concentrations from large volumes of solvent. The first such process to come into general use consisted in washing the dirty solvent with a caustic soda solution and then with water. It was soon found, however, that this process did not prevent the slow accumulation of color and odor.

In 1924 work instituted at the Bureau of Standards by the National Association of Dyers and Cleaners demonstrated that used cleaners' solvent could be reclaimed by the use of certain types of activated carbon in conjunction with aqueous alkaline solutions. Although this process was originally proposed for treating batches of contaminated solvent, it was soon found that the process could readily be applied in the continuous systems, which had previously used caustic solutions alone.

The activated carbon process for removing solvent contamination is essentially suitable for operation on the continuous system, rather than on the batch system, in that the cost of completely decolorizing a liter of badly contaminated solvent is quite high (comparable with the cost of steam distillation), while the cost of removing more or less completely a small amount of color from a large volume of solvent is low.

Laboratory tests indicate that the activated carbon process will not completely remove the varnish-like odor from used solvent, and there is some evidence that gradual accumulation will occur in continuous systems using this process in conjunction with motor gasoline.

Numerous attempts have been made to utilize fuller's earth and the newer activated earths for decolorizing used solvents, and equipment for this purpose is on the market. Laboratory tests, as well as actual cleaning-plant trials, indicate that the relatively large quantity of such decolorziing agents required and the considerable losses of solvent that are involved, together with the necessity for proper control of moisture content, more than compensate for the simplicity of equipment and process involved. The regeneration of exhausted earths, as practiced in the petroleum industry, does not appear to be feasible under the conditions of the dry-cleaning plant.

Continuous Decolorizing in Conjunction With Continuous Centrifugal Clarification

Ever since the introduction of the centrifugal clarifier for the continuous removal of suspended dirt and moisture from cleaners' solvent, attention has been given the question of selecting or developing suitable processes and equipment for removing color and odor from the clarified solvent. Three years ago it was definitely recognized that such a color-removing process must be of the continuous type; also that under the conditions met in the average cleaning establishment the decolorizing equipment need only handle a fraction of the solvent stream passed through the centrifugal clarifier.

Sulphuric Acid as a Decolorizing Agent

A re-examination in 1925 of known methods of removing dissolved contaminants from used cleaners' solvent led to the conclusion that there was a process—treatment with concentrated sulphuric acid—which would not permit slow accumulation of color and odor, and which did not require flocculation and "mat-settling," thus necessitating the provision of a large volume of solvent in which this could take place. With concentrated sulphuric acid at ordinary working temperatures (about 30 degrees Centigrade) the reaction is at least 70 per cent complete after three minutes' contact time. The density differential between the cleaners' solvent and the resultant tars facilitates the separation of the solvent from the reaction products, so that very compact equipment may be used.

Used cleaners' solvent after treatment with concentrated sulphuric acid may retain traces of acid tar apparently almost colloidally dispersed. It may also contain dissolved sulphur dioxide and other reaction products. These products may be removed by washing with water or alkaline solutions, but emulsification is likely to result if sufficient agitation is used to insure complete reaction. After a prolonged laboratory study of this problem, it was discovered that such difficulties could be avoided by using neutralizing solutions containing aqueous ammonia. (patent protection of this feature of the process is being sought.) The effectiveness of such ammoniacal solutions appears to be due to a slight solubility of ammonia in the hydrocarbon liquid. This in itself is an advantage, in that the presence of the odor of ammonia in the washer indicates that the neutralizing solution is functioning properly. Acid-treated solvent neutralized by the type of solution used leaves a residue in dry-distilling, which requires only about 1 milligram of potassium hydroxide per gram for neutralization.

Application to Decolorizing of Dry-Cleaners' Solvent

The re-refining of used cleaners' solvent by means of sulphuric acid is, of course, only practical for a solvent from which suspended dirt and moisture have already been removed. Furthermore, since the neutralized light-colored solvent may entrain about 0.15 per cent of aqueous solution, it cannot be admitted to the washer until this has been removed. To meet these conditions a circulating system is used.

The present units for decolorizing used cleaners' solvent by means of concentrated sulphuric acid are designed to receive continuously from the centrifugal clarifier used solvent of a color of not more than 100, at a rate of 500 liters per hour, and to deliver to the centrifugal clarifier, and through this to the washer, this stream of solvent decolorized to between 0 and 20 color, depending upon the condition of the acid charge. When receiving solvents at an average color of about 40 and returning it at an average of about 10, the decolorizing operation costs about 0.5 mill per liter, as shown by data from eight months' experimental plant operation, during which time 5,000 kilograms of clothing, blankets, rugs, etc., were dry-cleaned.

BURMAH OIL COMPANY ESTABLISHES COLLEGE

Sir Harcourt Butler, Governor of Burma and Chancellor of Rangoon University, has sent the following cablegram to Sir John Cargill, chairman of the Burmah Oil Co., regarding the offer of £100,000 at the annual meeting of the company to found a college of mining and engineering at the university:

"As chancellor, and on behalf of the Government and people of Burma, I tender to you, the directors and the shareholders of the Burmah Oil Co., our most grateful thanks for the offer of £100,000 for mining and engineering college. This noble and patriotic gift, following the munificent donations of yourself and David Cargill, will be remembered with gratitude and admiration for generations, and the B. O. C. College will stand as an enduring memorial of the great benefits that the B. O. C. has rendered to Burma and the Empire."

NEW YORK STATE MAY TAKE OVER CUBA SPRING

CUBA, N. Y., Aug. 6.—A move will be inaugurated at the next session of the Legislature to place the Seneca Indian Oil Springs here, the source of the first oil found on the American continent by a white man, under State supervision, according to Senator John Knight, majority leader of the Senate.

Under the terms of the proposal, the Oil Spring Reservation, which is now under the control of the Seneca Indian Nation, would be deeded to the Cuba Chamber of Commerce and then in turn placed under the control of the Allegheny State Park Commission. The Indians, it is understood, have expressed their willingness to the transfer, in view of the permanency of control which it would assure.

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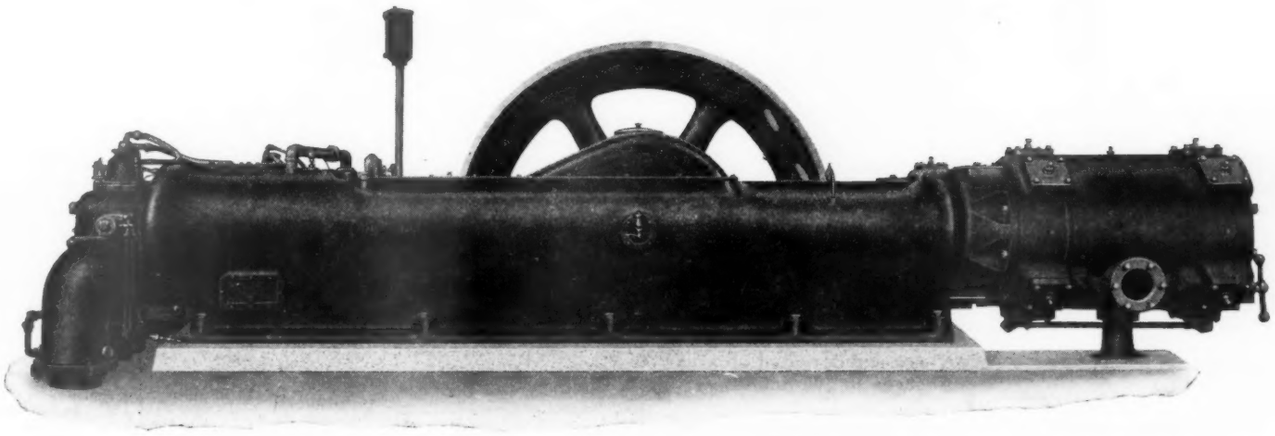

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CHANGES IN TEXAS OIL LEASES BEING MADE IN SOUTHWEST FIELDS

By B. D. Stevenson

SAN ANTONIO, Tex., Aug. 6.—Although the oil business, dating from Drake's discovery, is now 68 years old, not everything is known about the form of oil and gas lease, and recently radical changes have been made by a number of companies doing business in Texas, in the form of the oil lease. The old "form 88" that was in use in Texas for years, is not mentioned so frequently any more. Furthermore, when an independent operator gets a block of leases and starts to drill it on the custom approved method of selling protection acreage to major companies, he is found to have earned his money by the time he gets his titles cleared and his well drilled.

Of course when a major company blocks a piece of acreage it takes the leases on its own particular form and that settles it. When an independent operator blocks some acreage and expects to sell protection acreage to major companies the wisest thing for him to do is to get the lease forms from the major companies doing business in that territory and take his leases on a form that will meet all requirements.

One independent operator in Southwest Texas recently after taking his leases on "form 88" in order to meet the requirements of major companies taking protective acreage had to go back over the territory and get about six or eight separate afffidavits from various parties to cover propositions not covered in the lease. One of the affidavits was to the effect that all former oil and gas leases on the tract, if there had been any, had been cancelled. Affidavits were required from two disinterested parties to the effect that no producing oil or gas well had ever been completed on the tract and further that none was then started. When a prior lease had been given and cancelled an afffidavit was required from the banker handling the papers to the effect that it was cancelled. Still another required was an affidavit of the owner of the land for a period of years. Still another was an affidavit from the banker to whom rentals were to be paid in any previous lease transaction as to just what rentals were paid, how much and on what land and a certified copy of the letter of remittance sent with the check, if one was sent.

New Items

An important new item in some lease contracts is one requiring the land owner to pay his proportion of the expenses of treating oil in case it is necessary to treat it before it is put into the pipe line. In the case of the Luling Field in Caldwell county all of the oil must be treated to remove the water. Nothing was said in the contract and as a result the owner of the well must bear all the expense of treating the oil and the land owner gets his full one-eighth. One of the new forms reads: "Lessor's interest in either case to bear its proportion of any expense of treating unmerchantable oil to render it merchantable as crude, and on gas produced from said land and sold or used off the land or in the manufacture of gasoline, including casinghead gas, the market price at the well of one-eighth of the gas so sold or used, provided that if and when lessee shall sell gas at the wells lessor's royalty thereon shall be one-eighth of the amount realized from such sales."

One clause provides that if six or more people become entitled to royalties they must by written instruments provide some one person as the agent to receive the whole royalty payment. The splitting of royalty checks into 64ths, 128ths and 256ths or even worse is not relished by big companies.

Recently a court decision seemed to require that, say for instance an operator secured a lease on 10,000 acres of land and finds oil and develops a pool on say 2,500 acres of it, that he must go on and drill the entire 10,000 or else forfeit all his lease with the production. A clause in some contracts now provides that the lessee can surrender the unproductive part and retain that on which he has developed production.

Lawyers say that there must first be a lot of court decisions before oil and gas lease forms become standardized. One of the new wrinkles introduced into leases of course is made necessary by the geophysical instrument. All major companies are now writing their contracts to cover that and the probability is they will have to change the clause a number of times before they get it just right.

The "Exclusive" Idea

Another clause covers the "exclusive" idea. It used to be considered that when a man leased his land to someone to drill for oil or gas that he leased it to that one person alone exclusively and that he couldn't lease the land to more than one person at a time any more than he could deed it to more than one at a time, till a district court came along here in Texas and held otherwise and held that a lease was not an exclusive lease unless it distinctly said in so many words that it was exclusive. Now a clause has to go into the lease contracts to cover that feature.

Another thing that is being covered more carefully in lease contracts now than formerly is minerals. The possibility that potash will be found in West Texas may be responsible for that. The old form of lease was headed "Oil and Gas Lease." One company now heads its leases "Oil and Gas Mining Lease." Some others head their lease form "Mineral Lease." They all take into consideration that something else may be found of value other than oil or gas.

Lawyers say that the amending of lease contract forms has not yet reached the end and that several supreme court decisions will eventually be necessary probably to work the matter all out.

PRODUCTION IN SUMATRA

For the first time in several years, the production of petroleum in North Sumatra showed an increase in 1926, approximately 173,290 tons of crude being produced compared with 151,413 tons in 1925 and 166,573 in 1924. The output of the two producing districts, Langkat, Sumatra East Coast, and Porlak, Atjeh, has been steadily decreasing for a number of years and the production in 1925 was the lowest recorded for the northern part of Sumatra since 1912. Even with the relatively slight increase recorded in 1926 over the two preceding years, the 1926, production was still considerably below any year since 1912 and constituted a large decrease from the high record of 322,468 tons registered in 1917.

NORTH SUMATRA CRUDE

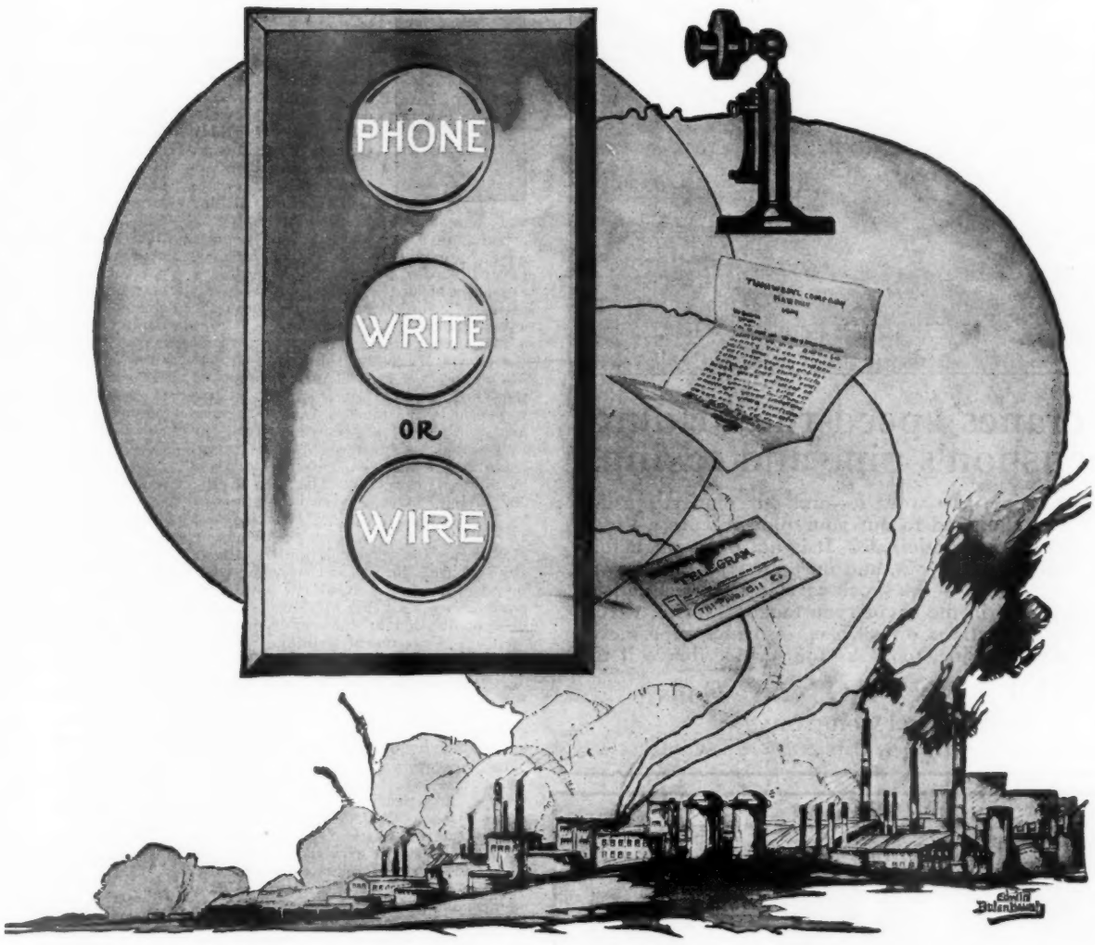
The crude from the North Sumatra fields differs from that in other petroleum centers of the Netherlands East Indies, and is markedly different from the Borneo crude. It yields an unusually high percentage of light distillates, approximately 61 per cent of the refined production consisting of superior grade gasoline and 25 per cent of superior grade kerosene. The only other finished products from North Sumatra are residue and Diesel and solar oil, amounting to about 10 and 4 per cent, respectively, of the total refined production.

GULF OIL CORPORATION

PITTSBURGH, Pa., Aug. 6.—The doubtful legal position of oil operators in Mexico has not had any appreciable effect on operations of the Gulf Oil Corp. which is continuing work in a normal manner.

Negotiations being carried on with Colombia Syndicate for acquisition of leases have not reached any definite stage.

The new $9,000,000 pipe line which will tie refineries on the Gulf Coast with the Gulf Oil Corp.'s lines from the Mid-Continent and Texas Panhandle Fields will not be completed until September.



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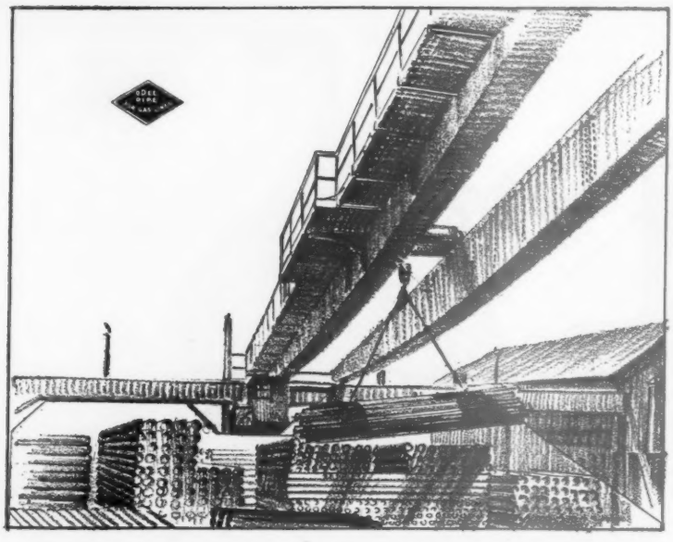

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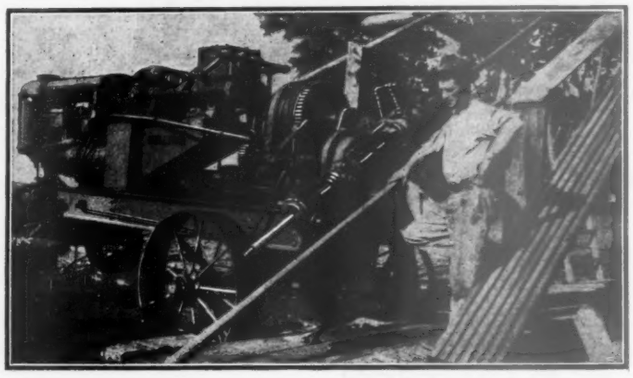

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OIL MEN REQUESTED TO ASSIST IN SENDING IN WELL CUTTINGS

By Charles E. Kern
Washington Bureau, The Oil and Gas Journal

WASHINGTON, D. C., Aug. 8.—The first effort to establish a commercial potash industry in the United States from other than brines and by-products is rapidly taking form by means of operations now under way in the western part of Eddy County, New Mexico.

The Snowden-McSweeney Co., organized for oil drilling and shunted into the potash industry by bringing in a dry hole in Eddy County, has a program for expending $500,000 in drilling for potash and has already expended about $300,000. Progress has been sufficiently promising to encourage a completion of the program.

Fortunately the company had taken the advice of the United States Geological Survey and had completely preserved the cuttings from its oil well. These were sent to Washington, D. C., and were analyzed just as any cuttings from any well would be analyzed, if the Government should be given a chance to do so by oil well operators. The fact is, 10,000 samples of salts have been gathered by the Geological Survey and analyzed. In this case as in others, the Snowden-McSweeney Co. wasn't permitted to have any advance information concerning what they had discovered and knew nothing of the analyses until they were made known in a publication by the survey.

Government Drilling

The Government itself determined to drill three wells to the north, south and west of what is known as the McNutt well of the Snowden-McSweeney Co., each of these government drillings, being located about 15 miles distant from the potash discovery.

Congress appropriated $100,000 for potash investigation. The Geological Survey was to locate centers of drilling, to be conducted by the Bureau of Mines, which was to turn over the cores to the Geological Survey for analyses. The law provided that this drilling should be done on private land and the owners were to be called upon to reimburse the Government for the expenditure necessary, but private land owners did not wish to obligate themselves for this experimental proposition and when the Government undertook to obtain leases its representatives were met with a flat refusal to cooperate on the part of the land owners.

This made it necessary to turn to government-owned land which the act of Congress also authorized to be drilled for experimental purposes, the operation to be paid for out of this fund, and it was decided to drill on Government land surrounding the operations of Snowden-McSweeney Co.

The Government's first well begun about last December has been drilled about 2,000 feet and its second well begun in May, has gone down something over 1,000 feet. The cores of these wells are now in the hands of the Geological Survey, and in a short time the survey will publish the analyses. W. B. Lang of the survey is on the ground selecting portions of the cores from Government as well as from private wells available in New Mexico and Texas.

It is thought that this favorable development of these potash deposits may prove a lesson to oil drillers, especially in Colorado and Utah and any other states in which salt deposits are developed, and cause them to follow the example of the Snowden-McSweeney Co. From the point of view of the survey the gathering and sending of cuttings from wells is a very simple matter. All that is necessary is that the driller, who can readily recognize salt beds when the cuttings are brought up, place about one ounce of the material in a small bag, mark it with the location and depth from which the cutting is obtained, and send it to the Geological Survey at Washington.

These samples will be analyzed and the result announced in a government statement available to everyone. Of course it is not possible for the owners of these wells to obtain private information respecting the contents of the samples from the Government.

Carnilite, silvite and kanite are the important salts from which potash is obtained and if the cuttings are submitted to a water bath, they will not show any of these minerals, then or later, however prominent they may appear in the sample if properly treated. These salts will not be found unless a saturate solution of magnesia and sodium chloride are used in drilling. Polyhalite, another important potash mineral, although soluble, may be found in the cuttings. Unless so treated they will forever evade the investigator. For this reason the drillers are warned that the only way by which these salts may be discovered is by the use of saturated brines in drilling and in the interest of a development of our natural resources analyses may be done by the government bureau here without cost to the well owner.

Indications of valuable salts have been found also in the Crescent-Eagle area east of Green River, Utah.

At this time the only real potash industry which has been developed and is marketing the product is located at Searles Lake, Calif. From this source it is estimated that about one-tenth of the potash market available in the United States is supplied. Much of this 10 per cent is consumed in the chemical industry rather than for agricultural purposes.

Utah and Colorado

It is particularly important in the view of the Government agents that oil drillers themselves in Utah and Colorado should consider means for discovering valuable potash salts, because at this time there is no government agency by which cuttings or cores from wells in those states are looked after for potash investigation by the Geological Survey. In New Mexico and Texas a fairly comprehensive system is in operation to keep track of the material that is brought up from oil wells, although even in those states it is said additional co-operation on the part of well owners would prove to be advantageous.

At this time probably 80 per cent of the 100 wells from which samples are being obtained are located in the State of Texas, and the others are in New Mexico. There are none in Oklahoma. In the McNutt well in Eddy County, New Mexico, a depth of 1,900 feet was reached and 27 layers of potash were found. The biggest layer is 7½ feet of potash salts which is regarded as sufficiently thick to warrant working. Some of the layers are as thick as 4 feet and it is believed by many that would be sufficiently large to permit profitable operation but the 7½-foot layer seems to leave no doubt as to its availability for commercial use. The value of smaller layers is problematical.

The practicability of the entire enterprise, after the nature of these potash salts has been determined, must depend largely upon marketing costs, and that makes railroad freight rates the big element in estimating the possibility of delivering these potash salts to the agricultural regions. The rates from New Mexico and Texas to agricultural regions will compete with rates by water from Germany and France to Atlantic, Gulf or Pacific ports combined with rail rates from the ports of entry to the consumers. It can readily be seen that in some instances German and French imports would have an advantage in these rates as they would be made up almost entirely of water transportation. How that will be worked out is still to be determined. Inland markets, however, will decrease the freight rates from New Mexico and Texas and increase the transportation charges on foreign potash.

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DRAFT MADE OF GENERAL INCOME AND EARNED SURPLUS ACCOUNTS

M. W. Mattison, director of the division of accounting and taxation of the American Petroleum Institute and chairman of the Committee on Uniform Methods of Oil Accounting, in giving out the tentative draft of published general income account and of earned surplus account, recently approved by the committee, stressed the points that these statements have not been finally approved by the committee or by the board of directors of the institute.

They will come up for final approval of the committee at another general meeting to be held in Chicago probably around October 15. In the meantime they are offered for criticism and suggestions by all those interested. The draft amounts to an outline of the work thus far accomplished and shows the very material progress which has been made. It is subject to suggested changes, probably primarily in the matter of the arrangement of the items.

Mr. Mattison stated that the Petroleum Accountants Society of California which submitted a chart of operating accounts, is now reworking the chart to conform with the general income account. He said the help of the society had been found very valuable and that it will have the chart ready for action also at the October meeting. The working out of the breakdown of assets in different divisions of the industry will also be in shape for discussion and action in October. In other words, Mr. Mattison's division and the general committee will have completed the two primary steps in uniform accounting, with the completion of the form of general balance sheet, adopted last year, and the general income account, which will undoubtedly be approved by the institute this year.

Foreign Companies Interested

An interesting development in the work on uniform accounting is the interest shown by foreign oil companies, notably those operating in Mexico and South America and in England. This has led to initial steps in co-operation. H. G. Humphries, of the Skelly Oil Co., who is now abroad, will take up the matter with several oil companies. Mr. Humphries is a member of the general committee. The value of this work will lie in establishing the same system of accounts, facilitating exchange of accounts, in cases of joint operations. It is believed this will be a valuable addition to the work of the committee.

In the meantime the general committee has proposed to the board of directors of the institute the formation, as a new department of the institute, of the division of finance and accountants, the activities of which will be devoted to the handling and discussing of the industry's co-operative finance and accounting problems and those of the men engaged in the financial and accounting departments of the oil companies. The division would have a divisional chairman and five sectional vice chairmen, serving without compensation, and a salaried executive secretary to supervise and conduct the general detailed work of the division's activities.

The tentative form of general income account and earned surplus account submitted for the criticism of the industry follows:

General Income Account

Gross operating earnings .....$....
Operating costs and expenses .....$....
Net operating earnings .....$....
Nonoperating income .....$....
Gross income .....$....

Deductions From Gross Income

Taxes (all kinds) .....$....
Interest on funded debt .....$....
Depletion, depreciation, amortization..$....
Intangible development costs .....$....
General interest, discount charges and other income deductions .....$....
Total .....$....
Net income for period .....$....
Income applicable to minority interests (deduct) .....$....
Net profit accrued to corporation.....$....

Gross Operating Earnings

Includes the gross amount of all operating revenues which the accounting company receives or becomes lawfully entitled to recover for sales of crude oil and gas, natural gasoline and refined products and containers for the same; for the transportation of oil by pipe lines, vessels, tank cars and other transportation facilities, and for all other sales and earnings constituting the operations of the major departments of the accounting company.

Includes also adjustments of amounts originally credited and deductions for discounts and allowances.

Note: Appropriate accounts to be maintained for each of the major operating departments will be prescribed.

Internal earnings of an intercompany interdepartmental nature should be recorded in separate subaccounts and eliminated in consolidated schedules.

Operating Costs and Expenses

Includes the cost of—

A. Outward transportation expenses, purchases of crude oil and gas, natural gasoline and refined products and containers for the same; manufacturing and other materials and supplies where the character of the commodities purchased or the operating conditions make it customary and desirable to determine the delivered cost of such products consumed or sold by the application of the fluctuation or net change (increase or decrease, as may apply) in the inventories of such items, also all transportation and other costs incurred in connection with such purchases.

B. All current operating expenses (other than purchases provided for above) of labor, traveling expenses, hauling, heat, light and power, supplies, rents for use of property and equipment, and all other expenses incidental to the operations of the business conducted. The term operation is used to designate a function, process, service or agency by which something is produced, transported, manufactured, stored, distributed or otherwise utilized or handled.

C. All repairs and maintenance charges such as labor, materials, contract services, and all other expenses incurred in replacing or repairing some part of a building, structure, facility or unit of equipment where the extent of such replacements does not add materially to their value or capacity, or amount to a substantial change of identity.

D. Inventory fluctuations in quantity and value of crude oil, natural gasoline and refined products and containers for the same, manufacturing and other materials and supplies directly chargeable to purchases (as provided for above) resulting in this account being debited with the amount of any decrease and credited with the amount of any increase in the value of the aforesaid inventories, thus arrving at the cost of products sold.

E. Administrative expenses such as compensation of general officers and employes, traveling expenses, office rentals, telegraph, telephone and radio expense, postage, stationery and printing, office supplies and expenses, legal expenses, general research expenses, associations' dues, donations and other general expenses.

F. Insurance premiums or self-carried insurance provisions applicable to the accounting period for insuring the accounting company against losses through injuries to persons, damage to or destruction or loss of property, loss of use of property or personnel; also all losses sustained and incidental expenses incurred not covered by insurance.

Note: Appropriate accounts to be maintained for each of the major operating departments will be prescribed.

Internal purchases and expenses of an intercompany or interdepartmental nature should be recorded in separate subaccounts and eliminated in consolidated schedule.

Net Operating Earnings

The total of the credit balance in gross operating earnings at the close of the period for which the accounts are stated, reduced by the total of the debit bal-

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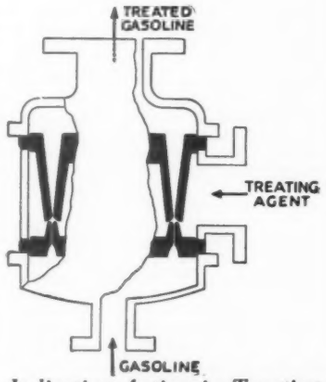

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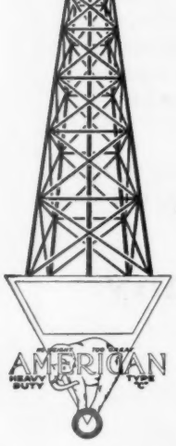

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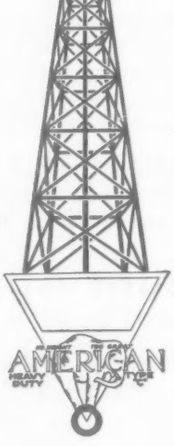

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ance in operating costs and expenses, constitutes net operating earnings.

Nonoperating Income

Includes all miscellaneous income not provided for in gross operating earnings, such as gain or loss from sale of serviceable capital (fixed) assets and investments (stocks, bonds, etc.), income from sales of materials and supplies, from jobbing and auxiliary operations; rental, interest and dividend income, income from reserve funds and from all other sources, commonly classed as nonoperating income. Expenses and deductions relating to items of nonoperating income should be charged against the particular class of income to which related, thereby reducing it to a net basis.

Gross Income

The total of net operating earnings and nonoperating income constitutes gross income.

Deductions From Gross Income

Taxes (all kinds)—

Includes the amount of all classes or kinds of taxes assessed by municipal, state and Federal Governments of the United States and foreign countries applicable to the operations of the accounting company during the period for which the accounts are stated, such as local property and other taxes, state excise, franchise, income, license production, severance, gasoline and other products sales, and other forms of taxes, Federal income and miscellaneous taxes. Taxes on gasoline sales assessed directly against the consumer and collected as a separate item by the accounting company for the state governments will not be included in this account except as a memorandum.

Note: Appropriate accounts to be maintained will be prescribed.

Interest on Funded Debt

Includes current accruals of interest on all classes of funded and long-term debt.

Note: Appropriate accounts to be maintained will be prescribed .

Interest relating to intercompany indebtedness should be recorded in separate subaccounts and eliminated in consolidated schedules.

Depletion, Depreciation, Amortization and Retirements

Includes amounts provided for exhaustion or extinguishment of the fixed (capital) assets computed on cost and appreciation (March 1, 1913, value and other appreciation) thereof, classified as to sustained depletion of oil and gas properties, sustained depreciation, including obsolescence of physical properties and equipment, amortization necessary to extinguish cost or appreciation of undeveloped leaseholds and other fixed assets subject to amortization; also adjusting amounts necessary to write off the book value in excess of reserves accrued of fixed (capital) assets surrendered, abandoned, demolished or retired, including cost of demolishing or removing and salvage credits realized in connection with property retired.

Note: Appropriate accounts to be maintained for each of the major operating departments, completely segregating in separate accounts charges based upon cost and upon appreciated values, respectively, will be prescribed.

When the accounting company adopts the policy of eliminating from its balance sheets published the accounts relating to appreciation (as recommended) it follows that all charges of the foregoing nature relating to appreciated values will be eliminated from the general income statements published.

Intangible Development Costs

Includes all direct charges (and adjusting credits) for labor, hauling, freight, rig rentals, drilling contracts, and other intangible costs of developing oil and gas properties where it is the policy of the accounting company to currently charge such costs to expense; where it is the policy of the accounting company to capitalize intangible development costs, this includes such portions of intangible development costs as are applicable to the current accounting period.

General Interest, Discount Charges and Other Income Deductions

Includes current accruals of interest on interest-bearing current liabilities; also, proper proportion of unamortized discount (and expense) or premium on funded and long-term debt, and costs incurred through the purchase of foreign money at a premium, employes' benefits, and all other deductions from gross income not provided for elsewhere and properly chargeable to income accounts, excluding, however, appropriations or dispositions of "income or surplus" resting solely in the discretion of the accounting company properly provided for in account 74—earned surplus.

Net Income for Period

The total gross income less the total deductions from gross income for the current accounting period constitutes the net income for period.

Income Applicable to Minority Interests

Includes portion of net income for period earned by the subsidiary companies included in a consolidated statement of general income account that is applicable to the shares of capital stock of the subsidiary companies owned by minority interests.

Net Profit Accrued to Corporation

The total consolidated net income for period less the amount of net income applicable to minority interests constitutes the net profit accrued to the corporation issuing a consolidated statement.

Earned Surplus Account

Earned surplus balance—beginning of period ..... $....
Net profit accrued to corporation—current period ..... $....
Earned surplus adjustments (debit or credit) ..... $....
Total ..... $....
Earned surplus—appropriated (specify) $....
Dividends on preferred stock ..... $....
Dividends on common stock ..... $....
Stock dividends (specify) ..... $....
Total ..... $....
Earned surplus—unappropriated—end of period ..... $....

Earned Surplus Account

This analysis of earned surplus is summarized in customary form to show changes in appropriations and dividend distributions of earned surplus during the accounting period.

Earned Surplus Balance—Beginning of Period

Includes balance of earned surplus (unappropriated) carried over from the previous accounting period.

Net Profit Accrued to Corporation—Current Period

Includes the net profit for period, or in the case of consolidated statements, the net profit accrued to the corporation issuing a consolidated income statement.

Earned Surplus Adjustments (Debit or Credit)

Includes all debit and credit adjustments of earned surplus applicable to prior fiscal years. Entries to this account should clearly indicate the nature of the item, and, if practicable, the year to which it relates.

Earned Surplus—Appropriated (Specify)

Includes charges for amounts specifically set aside from earned surplus by appropriate corporate action, as provided for in account 740—earned surplus—appropriated.

Appropriate accounts shall be maintained to meet the particular requirements of each accounting company.

Dividends on Preferred Stock

Includes amounts formally declared payable as cash dividends on actually outstanding preferred capital stock issued, or assumed by the accounting company.

In special cases where contract conditions warrant, this may include charges representing accruals of preferred dividends, even though not formally declared payable, if it is the policy of the accounting company to make such provisions.

Dividends on Common Stock

Includes amounts formally declared payable as cash dividends on actually outstanding common capital stock of the accounting company.

Stock Dividends (Specify)

Includes amounts of stock dividends formally declared on actually issued and outstanding preferred or common capital stock of the accounting company.

Appropriate subaccounts shall be maintained for stock dividends on each class of capital stock.

Earned Surplus—Unappropriated—End of Period

Includes balance of earned surplus (unappropriated) at end of accounting period.

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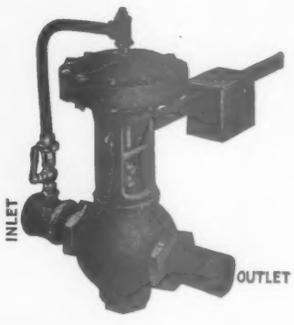

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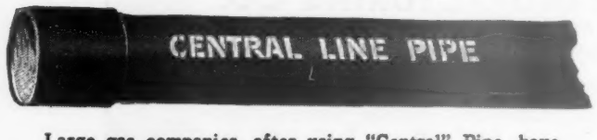

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NEW LOCATIONS IN TEXAS PANHANDLE AND NORTH AND WEST TEXAS FIELDS

TEXAS PANHANDLE

Hutchinson County

The Texas Company's No. 2 T. D. Lewis, 330 feet south and east of the NW cor. Section 7, Block 23, B. S. & F. Survey. The Texas Company's No. 3 T. D. Lewis, 2,970 feet north and 2,310 feet east of the SW cor. Section 5, Block 23, B. S. & F. Survey.

Carson County

Empire Gas & Fuel Co.'s new locations on the Burnett estate are as follows: No. 2 Burnett, 1,320 feet south and west of the NE cor. Section 23, Block 5, I. & G. N. Survey. No. 3 Burnett estate, 1,320 feet south and east of the NW cor. Section 44, Block 5, I. & G. N. Survey. No. 7 Burnett estate, 1,320 feet north and west SE cor. Section 49, Block 5, I. & G. N. Survey. No. 9 Burnett estate, 1,320 feet south and west NE cor. Section 50, Block 5, I. & G. N. Survey. No. 10 Burnett, 1,320 feet north and east of SW cor. Section 52, Block 5, I. & G. N. Survey.

Hale County

Engleking Drilling Co.'s No. 2 Mullican, 100 feet south and east NW cor. Section 66, Block A-3, I. & S. V. Survey. A. S. Mimms' No. 1 W. A. Ritcher, 1,200 feet north and 700 feet east of SW cor. Section 17, Block X, John Glynn Survey.

King County

Humble Oil & Refining Co.'s No. 1 Pitchfork Land & Cattle Co., 200 feet north and 2,640 feet east SW cor. Section 171, Block A-96, John H. Gibson Survey.

NORTH CENTRAL TEXAS

Archer County

King, Corlett & White's No. 1 L. F. Wilson-D, 150 feet north and 171 feet east, SW cor. Lot 957, Geraldine Subdivision, Section 85, A. T. N. C. L. Survey. Consolidated Oil Co.'s No. 2 Abercrombie & Taylor, 150 feet south and west SE cor. west 64.5 acres of north 129 acres, Section 12, Club Ranch Subdivision. George L. Pace and others' No. 1 Coleman, 150 feet north and 520 feet west SE cor. Section 6, W. M. Coleman Subdivision, Brazos County School Lands. Harrell & Allen's No. 1 Dunnam, 150 feet south and east NW cor. south 20 acres of west 40 acres of north half of Section 2,436, T. E. & L. Survey. McAlister and others' No. 1 Garvey, 1,200 feet north and west SE cor. Section 1,654, T. E. & L. Survey. Panhandle Refining Co.'s No. 2-C Prideaux, 150 feet south and east NW cor. of west 105 acres of east 120 acres of H. C. Prideaux 345-acre tract out of A. Rohus Survey, A-1,126. J. P. Rayzor's No. 1 Key, 150 feet south and 450 feet east of NW cor. of north 40 acres of east 120 acres of Section 42, Club Ranch Subdivision. Sun Oil Co.'s No. 1 A. L. Harris, 1,050 feet north and 1,500 feet east of SW cor. Section 92, Club Ranch Subdivision.

Baylor County

E. E. Fuller and others' No. 1 Malone, 150 feet north and west most southerly NW cor. Section 25, Block 1, D. & W. R. R. Survey, but located in Section 3, J. E. M. Crane Survey.

Brown County

A. H. Bowers and others' No. 1 W. E. Mauldin, 1,170 feet north and east SW cor. T. S. Strawn Survey, north 80 acres, A-1,230. E. M. Curry and others' No. 2 J. H. Teague, 150 feet south and west NE cor. J. H. Teague 107 acres in William Miller Survey No. 149. J. M. Gholson's No. 1 T. J. Collier, 150 feet south and 1,450 feet west SE cor. T. J. Swindell Survey, being 150 feet south and 1,450 feet east NW cor. of J. T. Collier 20-acre survey. Humble Oil & Refining Co.'s No. 20 Roy Hickman, 1,800 feet south and 450 feet west NE cor. their 160-acre lease out of Thomas Benson Survey No. 783. Humble Oil & Refining Co.'s No. 21 Roy Hickman, 2,100 feet south and 450 feet west NE cor. their 160-acre lease out of Thomas Benson Survey No. 783. Kone Production Co.'s No. 3 Roy Hickman, 450 feet north and 150 feet west of most northerly SE cor. their 164-acre tract, Thomas Benson Survey No. 783.

Roxana Petroleum Corp.'s No. 1 M. L. Smith, 150 feet north and east SW cor. south 60 acres of west 120 acres of east 140 acres of M. L. Smith 340 acres in Section 1, S. A. & M. C. A-849. A. T. Russell's No. 1 Mrs. S. Early, 422 feet north and 750 feet east SW cor. J. J. Clelland Survey No. 64. Wentz Oil Corp.'s No. 28 J. W. Shore, 1,410 feet south and 770 feet west, NE cor. their 240 acres in S. Betts Survey No. 625. Wentz Oil Corp.'s No. 29 J. W. Shore, 1,860 feet south and 1,070 feet west NE cor. their 240-acre lease in S. Betts Survey 625. J. W. Crites' No. 1 Sam Cutbirth, 3,237 feet northwest of SE line and 1,800 feet SW of NE line of T. S. Goodman Survey 290, A-363. A. H. Voltz' No. 1 T. E. Simmons, 1,050 feet northeast of SW line and 550 feet northwest of SE line of S. H. Hart Survey No. 4.

Callahan County

T. E. Morgan and others' No. 1 J. B. Cutbirth, 1,980 feet north and 660 feet east SW cor. B. Garcia Survey No. 208. Mortimer and others' No. 1 J. H. Brown, 660 feet south and 1,320 feet east NW cor. SW Section 47, Deaf & Dumb Asylum Lands. Stalker Oil Co.'s No. 1 Seale estate, 1,500 feet north and 1,366 feet west of most northerly SE cor. Section 12, Block 3, T. P. R. R. Survey.

Coleman County

H. Samuels and others' No. 1 J. B. Pitts, 1,000 feet south and 150 feet east NW cor. J. B. Pitts 300 acres of John Johnson Survey No. 45. Ingleright and others' No. 1 J. E. McClure, 150 feet north and 2,250 feet west SE cor. J. E. McClure 376 acres in Wharton County School Lands, 496.

Cooke County

J. R. Abernathy's No. 2 J. E. Dayton, 4,000 feet south and 1,000 feet west of most northerly NE cor. of Francis Godley Survey, A-393. Arco Oil Co.'s No. 1 C. A. Stelzer, 305 feet south and 150 feet west of NE of east 45 acres of C. A. Stelzer 104-acre tract out of Bariett Anibal Survey A-5. Danciger Oil & Refining Co.'s No. 1 W. A. Harris-B, 150 feet north and west SE SW of W. A. Harris 160 acres out of J. Harris Survey, A-502. Gainesville Oil & Development Co.'s No. 2 J. Stoffel, 150 feet south and east of NW cor. Block 58, Town of Muenster. R. R. Gray and others' No. 2 Public Park, 150 feet north and west of SE cor. Block 59, Town of Muenster.

Eastland County

Dick Barkley and others' No. 1 A. P. Barton, 200 feet south and east NW cor. J. A. Weeks Survey. J. Gholson and others' No. 1 C. R. Brazendale, 250 feet north and 1,640 feet west of SE cor. C. R. Brazendale 100-acre tract in N. H. Hooe Survey. Chestnut & Smith's No. 1 L. T. Griggs, 907 feet north and 990 feet west SE cor. L. T. Griggs' 212-acre tract in A. Miller Survey. McCamey and others' No. 1 W. M. Morrison, 1,125 feet ssouth and 1,950 feet east NW cor. Section 28, B. B. B. & C. Survey and located in Rising Star. Milham Corp.'s No. 2W. L. Barnett, 200 feet north and west SE cor. north 65 acres west half of SW Section 15, Block 3. H. & T. C. Survey. C. M. Root and others' No. 3 J. T. Watson, 300 feet south and east of NW cor. SW Section 37, Block 4, H. & T. C. Survey.

Hardeman County

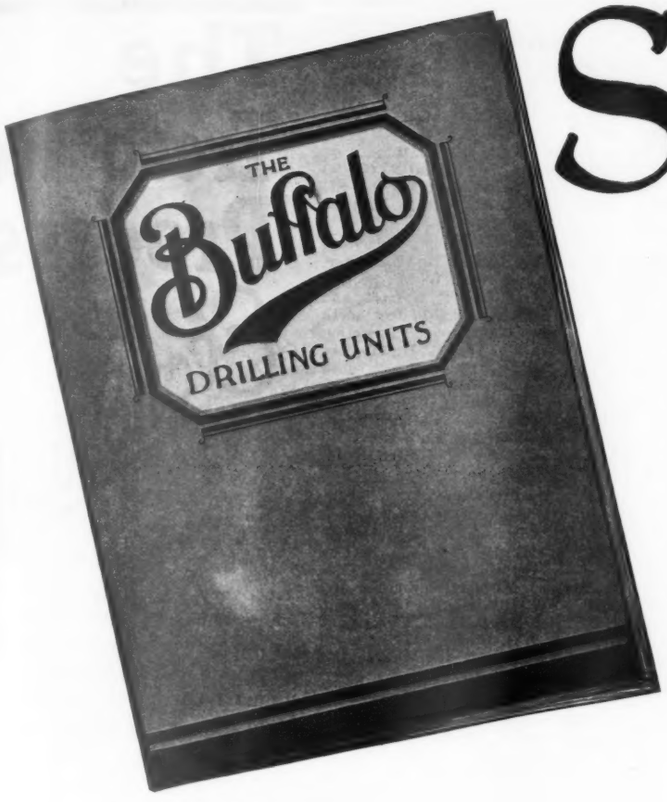
Milham Corp.'s No. 1 Reeves, C SW Block 2, E. T. R. R. Survey.

Jack County

Bland & Strang's No. 1 Brentmore, 614 feet south and 1,378 feet west NE cor. Section 3, J. W. Williams Survey, A-877. Bland & Strang's No. 2 Brentmore, 314 feet south and 1,378 feet west NE cor. Section 3, J. W. Williams Survey, A-877. Reed & Neeley's No. 1 Mrs. Keyser, 150 feet north and east SW cor. Mrs. P. B. Keyser 160-acre tract out of Section 6, S. P. R. R. Survey, A-1,502.

Montague County

Continental Oil Co.'s No. 2 Maddox,



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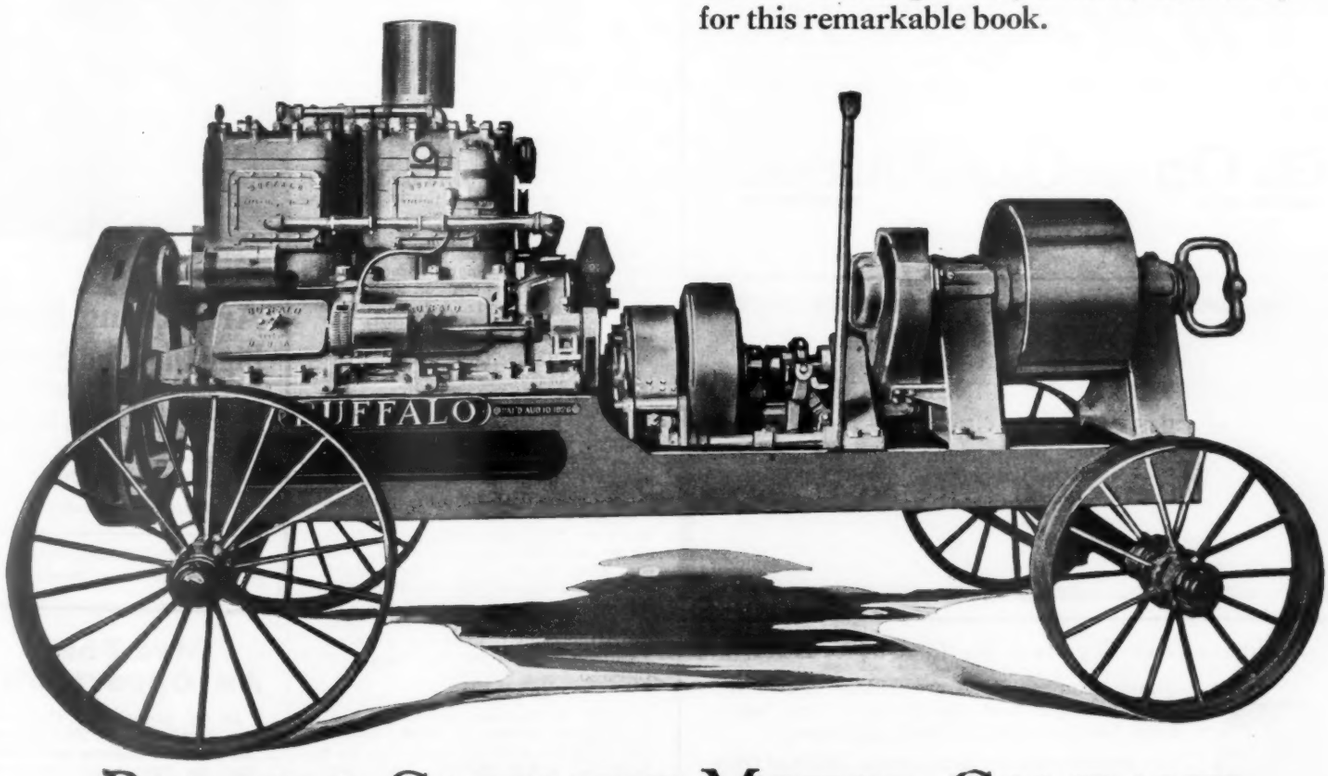

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Shackelford County

Bridwell and Heydrick No. 1 McKelvey, 150 feet south and east NW cor. Section 9, Block 11, T. P. R. R. Survey. Earl and Dull No. 1 J. B. Matthews, 150 feet south and west NE cor. SE NE Section 52, Block 10, E. T. R. R. Survey. Earl and Dull No. 2 J. B. Matthews, 490 feet south and 150 feet west NE cor. SE NE Section 52, Block 10, E. T. R. R. Survey.

Stephens County

Prairie Oil & Gas Co.'s No. 2 Proctor, 330 feet south and east NW cor. Section 1,325, T. E.& L. Survey. Garrett and Moore's No. 1 Tomlinson, 517 feet north and 268 feet west SE cor. NE, Section 446, S. P. R. R. Survey. C. H. Hatcher and others' No. 1 Litton, 300 feet south and east NW cor. of T. F. Litton 132.5 acre tract of SE Section 67, Block 4, T. P. R. R. Survey. Texas Fidelity Oil Co.'s No. 1 Lipe, 750 feet south and 1,250 feet east of NW cor NW Section 71, Block 6, T. P. R. R. Survey.

Wichita County

Atlantic Oil Producing Co. and others' No. 1 W. T. Waggoner-H, 750 feet north and 150 feet east, SW NE SW, Section 33, Block 5. Petroleum Producers Co.'s No. 3 Munger, 450 feet south and 759 feet east, NW cor. Section 31, Kemp Wichita Valley Lands. J. H. Turner and others' No. 1 G. R. Hodge, 990 feet north and 450 feet east SW cor. Section 33, Kemp Wichita Valley Lands.

Wilbarger County

Consolidated Oil Co. and Cosden's No. 8 W. T. Waggoner, NE NE NW Section 57, Block 4, H. & T. C. Survey.

Young County

Donohoe and Johns' No. 1 S. Eichelber, 150 feet south and 1,025 feet east of NW cor. Section 1,453, T. E. & L. Survey, being 525 feet east and 150 feet south of NW cor. of east 40 acres of west 60 acres of north 80 acres of west 165 acres of Section 1,453. F. P. Rose's No. 1 A. C. Casey, 150 feet north and east SW cor. of east half Section 1,494, T. E. & L. Survey.

WEST TEXAS

Coke County

W. H. Brown and others' No. 1 W. L. Foster, 150 feet north and west of SE cor. Section 149, Block 2, H. & T. C. Survey.

Concho County

Associated Petroleum Co.'s No. 1-A Sam Waring, 330 feet north and 800 feet east of SW cor. of Jacob Gotthardt Survey No. 2,035.

Crane County

Landreth Production Corp.'s No. 14 State-Cowden-Anderson, 200 feet south and 4,290 feet east of SW cor. Section 47, Block 30, University Land, and located in Jax Cowden Survey No. 10, Block J-C. Magnolia Petroleum Co.'s No. 10 University-Hardwicke, 1,650 feet south and west of NE cor. Section 46, Block 30, University Land; No. 11, 2,310 feet south and 1,650 feet west of same NE cor. Pecos Oil Co.'s (formerly Cromwell & Pickrell), No. 9 University, 1,650 feet north and 2,310 feet east of SW cor. Section 47, Block 30. Simms & Atlantic's No. 8 University-D, 2,310 feet north and 990 feet west of SE cor. Section 46, Block 30; No. 9 University-D, 2,310 feet north and 1,650 feet east of same SE cor. Tidal Oil Co.'s No. 7 University-F, 1,650 feet south and 990 feet west of NE cor. same section; No. 8, 2,310 feet south and 990 feet west of NE cor. same lease; No. 4 University-I, 1,650 feet north and 2,310 feet west of SE cor. Section 47, Block 30.

Howard County

George A. Henshaw and others' No. 1 S. T. Eason (or Settles) 1,650 feet south and 2,310 feet west of NE cor. Section 6, Block 32, T. & P. Survey, T-2-S. Magnolia Petroleum Co.'s No. 6 Kelly Chalk, 990 feet south and east of NW cor. Section 124, Block 29, W. & N. W. Survey; No. 7 Kelly Chalk, 1,650 feet south and 990 feet east of same NW cor.

Mitchell County

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California Insurance Co., San Francisco, Calif.
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Sentinel Fire Insurance Co., Springfield, Mass.
Springfield Fire & Marine Ins. Co., Springfield, Mass.
St. Paul Fire & Marine Ins. Co., St. Paul, Minn.
Star Insurance Co. of America, New York, N. Y.
Sun Insurance Office, London, Eng.
Svea Fire & Life Ins. Co., Gothenburg, Sweden.
Superior Fire Ins. Co., Pittsburgh, Pa.
Travelers Fire Insurance Co., Hartford, Conn.
Union Assurance Society, London, Eng.
Union Insurance Society of Canton, Hong Kong
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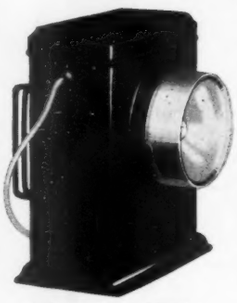

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Pecos County

Mid-Kansas Oil & Gas Co. and Transcontinental Oil Co.'s No. 2 Smith-Taylor, 1,708 feet south and 250 feet east of NW cor. Section 33, Block 194, G. C. & S. F. Survey. Transcontinental Oil Co.'s No. 1 Blackstone & Slaughter, 250 feet north and 1,150 feet east of SW cor. Section 29, Block 129, T. & St. L. Survey.

Upton County

Champlin Oil & Refining Co.'s No. 1 J. F. Lane, 330 feet north and east of SW cor. SW SE, Section 3, G. C. & S. F. Survey, A-212. Dixie Oil Co.'s No. 29 A. S. Burleson, 330 feet north and west of SW cor. same section and located in the John Nidever Survey No. 2. Prairie Oil & Gas Co.'s No. 4 Allie Lane, 330 feet north and east of SW cor. Section 3, G. C. & S. F. Survey, A-212. The Texas Company's No. 3 J. M. Perry, 330 feet south and 1,650 feet east of NW cor. Section 3, G. C. & S. F. Survey, A-230.

Winkler County

Humble Oil & Refining Co.'s No. 2 Grisham-Hunter, 330 feet north and west of SE cor. NE, Section 34, Block B-5, Public School Land. Pure Oil Co.'s No. 1 Grisham-Hunter-B, NE cor. SE, Section 34, Block B-5. Southern Crude Oil Purchasing Co.'s No. 1 T-89 Grisham-Hunter-A, 1,980 feet north and 1,650 feet east of SW cor. Section 35, Block B-5, Public School Land.

Mexican Shipments During Month of June Dropped 510,375 Bbls.

By George Blardone
Mexican Bureau, The Oil and Gas Journal

TAMPICO, Mexico, Aug. 5.—Shipments of petroleum from Tampico during the month of June totaled 5,306,173 bbls. There were no shipments from Tuxpam.

The June shipments show a decline from the May movement of 510,375 bbls. The decline from June, 1926, is 2,039,991 bbls. There was not much of moment in the shipments in question, unless, indeed, a shipment of asphalt to Java—say some 23,131 bbls.—can be taken into account.

The movement in detail follows:

FROM TAMPICO
By Huasteca Petroleum Co.

June	Rig, Vessel, Destination—	Bbls.
1	Ss E. L. Doheny, N. Orleans	58,276
1	Ss Ashtabula, Southampton	*49,192
3	Ss F. H. Wickett, Providence	*80,996
3	Ss W. H. Doheny, New York	†79,049
4	Ss P. H. Harwood, Boston	*67,646
5	Ss Cerro Azul, New York	*81,395
5	Ss Comet, New Orleans	18,001
7	Ss Elisha Walker, New York	*68,752
8	Ss Norman Bridge, Baltimore	*41,176
8	Ss S. M. Spalding, Boston	*66,329
9	Ss M. Luckenbach, Boston	*49,050
11	Ss Malabar, New York	75,861
12	Ss C. A. Canfield, New York	*62,451
12	Ss Fred Ewing, Providence	*66,870
12	Ss C. E. Harwood, New Orleans	†34,845
13	Ss O. D. Bennett, Jacksonville	*50,135
14	Ss Gene Crawley, N. Orleans	30,723
15	Ss Mantilla, New York	*53,706
16	Ss Cerro Ebano, New York	*80,650
16	Ss Montana, Buenos Aires	*57,401
17	Ss J. M. Danziger, Baltimore	67,690
18	Ss Hugoton, Baton Rouge	41,092
18	Ss Meline, New York	*62,447
19	Ss R. W. Stewart, New York	*80,223
20	Ss Gladysbe, New Orleans	48,779
20	Ss F. R. Kellogg, Buenos Aires and Montevideo	*60,376
22	Ss F. H. Wickett, Providence	*80,019
23	Ss Darden, Jacksonville	*49,010
25	Ss A. E. Watts, New York	*64,146
25	Ss Invergordon, Southampton	*54,526
25	Ss Gene Crawley, New Orleans	30,397
26	Ss Cerro Azul, New York	*81,642
27	Ss Virginia, Charleston	61,218
28	Ss P. H. Harwood, Boston	*65,621
29	Ss Kennebec, Southampton	*49,598
	Coastwise deliveries	*179,365
	Coastwise deliveries	†25,078
	Bunker deliveries	182,227
	Total	2,455,958

By Transcontinental Petroleum Co.

June	Rig, Vessel, Destination—	Bbls.
1	Ss Matinicock, Montreal	77,033
2	Ss Muskogee, Charleston	72,831
7	Ss Hugoton, Baton Rouge	68,629
8	Ss Pioneer, Baton Rouge	49,612
10	Ss Ardmore, Baltimore	75,842
13	Ss Glenpool, Baton Rouge	51,823
16	Ss Agwimex, New York	82,418
17	Ss T. J. Williams, Southampton	76,886
17	Ss Princeton, Baton Rouge	49,277
19	Ss Muskogee, Baltimore	54,000
19	Ss Hugoton, Baton Rouge	29,186
20	Ss Muskogee, Baltimore	17,496
20	Ss Glenpool, Baton Rouge	52,808
27	Ss Topila, Baltimore	49,943
30	Ss Pioneer, Baton Rouge	49,713
	Total	857,497

By Cia. Mexicana-Holandesa La Corona, S. A.

June	Rig, Vessel, Destination—	Bbls.
1	Ss A. W. Sewall, U. S. A.	55,153
2	Ss W. F. Burdell, U. S. A.	68,779
2	Ss W. E. Hutton, U. S. A.	68,381

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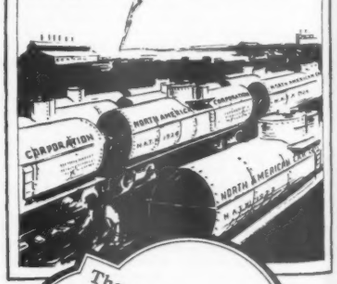

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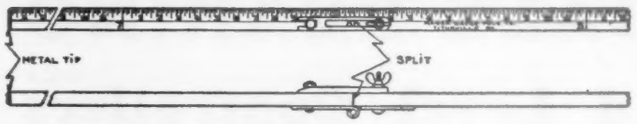

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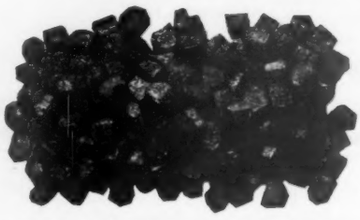

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30	Ss	Devrefjell, Nassau f/o	48,265
30	Ss	Davanger, Nassau f/o	58,736
		Bunker deliveries	56,435
		Total	825,598

By Mexican Eagle Oil Co., Ltd.

June Rig	Vessel, Destination—	Bbls.
3	Ss San Macedonio, Valparaiso	†27,001
6	Ss San Leonardo, Nassau f/o	*47,526
6	Ss Vancouver, Key West (asphalt)	35,693
13	Ss Santa Aurora, Nassau f/o (asphalt)	36,289
17	Ss Nessian, Manchester (asphalt)	6,437
20	Ss San Silvestre, Nassau	†43,512
21	Ss Auditor, Rotterdam (asphalt)	8,654
23	Ss Mesopotamia, Java and Malaya (asphalt)	23,131
28	Ss San Tirso, Nassau f/o	*29,753
29	Ss Port Albany, New York (asphalt)	23,935
29	Ss Largo Law, Brazil Ports	†35,028
	Coastwise deliveries	†56,386
	Coastwise deliveries	*8,417
	Bunker deliveries	32,744
	Total	414,506

By Mexican Sinclair Petroleum Corp.

June Rig	Vessel, Destination—	Bbls.
3	Ss Gene Crawley, Havana	30,767
6	Ss Mirita, Philadelphia	54,681
14	Ss Harry Farnum, New Orleans	30,830
16	Ss W. E. Ogilvie, Belic, Cuba	8,645
17	Ss W. L. Connelly, New Orleans	30,305
19	Ss Madrono, Nuevitas & Tarafa	53,634
22	Ss Harry Farnum, New Orleans	31,142
24	Ss E. V. R. Thayer, Philadelphia	67,447
29	Ss W. L. Connelly, New Orleans	30,440
	Bunker deliveries	22,123
	Total	360,014

By Mexican Atlas Petroleum Co.

June Rig	Vessel, Destination—	Bbls.
3	Ss Caloria, New York	41,390
8	Ss Cassimir, New York	45,690
12	Ss Carrabulle, New York	47,589
30	Ss Cassimir, New York	16,212
	Bunker deliveries	11,905
	Total	162,786

By The Texas Company

June Rig	Vessel, Destination—	Bbls.
20	Ss Pennsylvania, Marcus Hook	38,989
20	Ss Pennsylvania, Marcus Hook	*15,617
22	Ss Occidental, Providence	*55,640
29	Ss Louisiana, Port Arthur	13,916
29	Ss Louisiana, Port Arthur	*11,824
	Bunker deliveries	6,921
	Total	142,907

By La Espuela Oil Co.

June Rig	Vessel, Destination—	Bbls.
7	Ss F-Sulphur 1, Freeport	19,745
12	Ss F-Sulphur 1, Freeport	20,025
17	Ss F-Sulphur 1, Freeport	18,856
	Total	58,626

By Mexican Oil Products Corp.

June Rig	Vessel, Destination—	Bbls.
30	Ss Cassimir, New York	28,281

JUNE SUMMARY

From Tampico June, 1927		5,306,173
June, 1926		7,346,164
Decrease June, 1927		2,039,991

DIVISION OF MOVEMENT

To United States	3,622,749
Cuba and West Indies	567,906
Mexican Coastwise	277,900
United Kingdom	236,639
South America	179,806
Canada	77,033
Java	23,131
Continent	8,654
Bunkers (to balance)	312,355
Total	5,306,173

CLASSES

Crude	2,689,281
Topped crudes	1,857,675
Other refined	312,723
Asphalt	134,139
Bunkers (to balance)	312,355
Total	5,306,173

*Denotes topped crude; †denotes other refined.

INSTITUTE OF FUEL

The Institute of Fuel has been inaugurated in London when the requisite resolutions were passed by members of the Institution of Fuel Technology, members of the Institution of Fuel Economy Engineers having previously passed the resolutions for the merging of the two bodies. Sir Alfred Mond is the first president of the new institute. The address of the Institute of Fuel is 202, Abbey House, Westminster, London, S. W. I.

MEXICAN OIL TAXES

A leading article in El Universal, claimed to be based on semiofficial sources, states that beginning July 26, petroleum companies began paying into the Bank of Mexico exploitation and production taxes which were in arrears from the previous month. The motive for delay in payment was declared to be that two of the largest companies made a loan to the Government of the State of Vera Cruz, which Government delivered to the lenders promissory notes. The latter have not been accepted by the Federal Government in payment of oil taxation.

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Oklahoma-Kansas and Eastern Pipe Line Report

OKLAHOMA-KANSAS
Pipe Line Statement for June

Company—	Month	Daily Av.
*Prairie P. L. Co.	4,440,000	148,000
Gulf P. L. Co.	1,330,590	44,353
Texas P. L. Co.	853,625	28,454
Magnolia Pet. Co.	1,716,829	57,228
Empire P. L. Co.	1,826,981	60,899
Cosden P. L. Co.	971,624	32,387
Sinclair P. L. Co.	2,415,090	80,503
*Other lines	12,720,000	424,000
Total June	26,264,739	875,824
Total May	26,935,013	868,870
Difference	670,274	6,954

Shipments

*Prairie P. L. Co.	5,505,552	183,518
Gulf P. L. Co.	1,122,928	37,431
Texas P. L. Co.	725,638	24,188
Magnolia Pet. Co.	1,206,159	40,206
Empire P. L. Co.	1,253,736	41,791
Cosden P. L. Co.	826,072	27,536
‡Sinclair P. L. Co.	2,633,047	87,768
*Other lines	12,000,000	400,000
Total June	25,273,132	842,437
Total May	25,887,274	835,073
Difference	614,142	7,364

Stocks

*Prairie O. & G. Co.	30,300,000
*Prairie P. L. Co.	2,000,000
Gypsy Oil Co. & Gulf P. L. Co.	8,761,873
The Texas Company	4,723,332
Magnolia Pet. Co.	5,611,652
Empire P. L. Co.	3,277,315
Cosden P. L. Co.	2,915,742
*Sinclair Crude Oil Pur. Co.	19,600,000
Carter Oil Co.	15,538,629
*Other lines	10,650,000
Total June	103,378,545
Total May	101,197,942
Difference	2,180,602

*Estimated. ‡Prairie Pipe Line shipments include Texas crude and Sinclair Pipe Line shipments include Wyoming, Texas crude. Note—Stocks do not include approximately 4,000,000 bbls. of crude oil held in storage on private tank farms and leases and approximately 1,700,000 bbls. of Texas Panhandle crude in storage in Oklahoma and Kansas.

EASTERN PIPE LINES
Runs From Wells

In the following table will be found the regular receipts from wells by various pipe lines in New York, Pennsylvania, West Virginia, Ohio, Kentucky and Indiana for May and June:

	May, '27	June, '27
Nat. Transit	157,165.84	157,315.01
S. W. Pa. P. L.	90,017.98	93,809.85
Eureka P. L.	392,779.77	390,791.12
Buckeye P. L. (Macksburg)	352,189.09	344,562.31
Buckeye P. L. (Cleve.)	11,455.70	11,529.52
Buckeye P. L. (Lima, etc.)	124,796.30	139,036.28
Indiana P. L.	10,527.86	11,406.99
Cumberland P. L.	256,545.97	250,266.24
N. Y. Transit	23,432.96	24,809.81
Tidewater P. L.	189,601.39	189,396.14
Pure Oil	170,519.75	167,610.92
Emery P. L.	55,212.48	55,995.64
Paragon Dev.	29,001.79	26,923.82
Pittsburgh P. L.	5,562.53	5,710.36
Soil Oil Ref.		13,632.37
Total	1,868,809.41	1,882,695.38
Daily average	60,284.17	62,756.51

Note: Indian Refining Co. also reported other receipts of 369,938.94 bbls. Paragon Refining Co. had other receipts of 172,169.81 bbls. Paragon Development had other receipts of 2,652.29 bbls. Pure Oil had other receipts of 15,161.30 bbls.

Petroleum Deliveries

The following tables exhibit the shipments or regular deliveries of various pipe lines in New York, Pennsylvania, West Virginia, Ohio, Kentucky and Indiana for May and June.

	May, '27	June, '27
Nat. Transit	231,962.23	207,649.33
S. W. Pa. P. L.	369,312.49	317,891.14
Eureka P. L.	196,684.71	181,937.70
Buckeye P. L. (Macksburg)	168,751.29	165,198.17
Buckeye P. L. (Cleve.)	730.53	971.56
Buckeye P. L. (Lima, etc.)	961,591.53	930,510.48
Indiana P. L.	995,738.41	975,616.39
Cumberland, P. L.	135,591.56	150,959.91
N. Y. Transit	329,615.40	315,171.90
Northern P. L.	194,488.92	187,632.80
Tidewater P. L.	140,789.69	139,216.41
Pure Oil	214,677.25	163,634.23
Emery P. L.	54,063.88	54,410.09
Paragon Ref.	160,374.55	171,015.11
Indian Ref.	401,075.59	394,960.00
Paragon Dev.	30,880.92	29,986.63
Pittsburgh P. L.	5,390.35	6,384.84
Total	4,491,719.30	4,493,146.29
Daily average	144,894.17	149,771.54

Gross Stocks

The gross stocks held by various pipe lines in the oil producing sections of New York, Pennsylvania, West Virginia, Ohio, Indiana and Kentucky, at the close of May and June:

	May, '27	June, '27
Nat. Transit	1,153,962.57	1,150,482.45
S. W. Pa. P. L.	680,944.30	705,837.92
Eureka P. L.	1,540,369.93	1,760,893.31
Buckeye P. L. (Macksburg)	447,695.96	450,027.81
Buckeye P. L. (Cleveland)	52,293.46	38,348.14
Buckeye P. L. (Lima, etc.)	4,198,037.49	4,303,614.65
Indiana P. L.	588,782.56	585,161.78
Cumberland P. L.	620,713.60	581,519.53
Southern P. L.	407,385.13	406,472.60
N. Y. Transit	621,235.51	513,088.14
Northern P. L.	551,236.96	509,881.48
Pure Oil	379,362.15	397,272.76
Emery P. L.	8,061.15	9,961.99
Paragon Ref.	23,688.15	24,515.54
Indian Ref.	74,318.76	45,531.36
Paragon Dev.	6,892.28	6,969.48
Pittsburgh P. L.	4,401.32	4,104.27
Total	11,359,381.28	11,493,673.21
Increase	247,086.45	134,291.93

Grades of Oil

The following table shows the amount of the different grades of oil held by the eastern pipe lines at the close of May and June showing the gross stocks of the above fields:

	May, '27	June, '27
Pennsylvania	3,882,764.43	4,097,743.11
Lima	878,323.51	939,796.06
Kentucky	1,204,896.59	1,190,128.39
Mid-Continent	5,339,671.75	5,233,298.85
Illinois	53,725.00	32,706.30
Total	11,359,381.28	11,493,673.21

Daily Average Runs

The following table shows the daily average runs of the Pennsylvania, Lima and Kentucky oil fields for the past four years:

	1924	1925	1926	1927
January	62,638	56,831	55,630	56,209
February	68,023	60,606	60,394	61,298
March	65,721	60,575	61,644	63,247
April	71,058	63,062	63,019	60,337
May	63,942	59,217	60,580	60,284
June	63,230	61,270	64,131	62,757
July	64,208	62,639	63,206	.....
August	59,942	59,686	61,815	.....
September	62,930	62,510	64,639	.....
October	64,976	60,995	62,704	.....
November	56,282	59,350	61,774	.....
December	55,814	57,974	58,755	.....

Daily Average Shipments

The following table gives daily average shipments from the Pennsylvania, Lima and other fields for the past four years:

	1924	1925	1926	1927
January	145,518	157,889	156,056	141,227
February	148,732	160,863	159,488	138,534
March	147,098	154,591	150,239	133,777
April	147,611	151,429	152,372	140,227
May	134,997	146,995	160,998	144,894
June	143,010	149,467	160,257	149,772
July	124,187	161,338	160,945	.....
August	123,120	161,730	151,929	.....
September	127,325	156,719	158,915	.....
October	123,170	145,388	161,132	.....
November	124,400	143,582	152,668	.....
December	151,392	150,162	136,428	.....

Gross Stocks

In the following table will be found the gross stocks of the various lines of the Pennsylvania, Lima and Kentucky oil fields, including oil received from other lines at the close of each month for the past three years:

	1925	1926	1927
January	11,353,276	9,859,170	9,718,0
February	11,192,924	9,579,354	10,119,1
March	11,158,297	9,438,292	10,794,0
April	11,062,082	9,805,851	11,112,2
May	11,207,562	9,531,757	11,359,3
June	11,093,796	9,585,904	11,493,6
July	11,067,453	9,734,687	.....
August	10,974,481	9,668,947	.....
September	10,781,753	9,433,732	.....
October	11,086,850	9,269,806	.....
November	11,068,158	9,267,667	.....
December	10,458,445	9,454,512	.....

Franklin Pipe Line Co.

The following table exhibits the condition of the Franklin Pipe Line at the close of business for the months named and not counted in the stocks and averages reported above.

1926—	Runs	Shipmts.	Stocks
May	2,933.29	2,096.35	13,295.9
June	3,217.62	1,655.15	14,858.4
July	3,025.86	4,075.11	13,809.1
August	2,886.59	2,121.21	14,574.5
September	2,788.18	3,373.06	13,985.6
October	2,991.86	2,307.75	14,671.3
November	3,810.60	1,664.55	15,817.3
December	3,847.52	5,561.11	13,103.7
1927—			
January	2,641.54	1,470.42	14,274.8
February	2,764.30	1,082.82	15,956.3
March	2,587.20	1,878.56	16,664.9
April	2,834.23	1,512.65	17,986.5
May	2,768.47	539.29	20,215.7

The Illinois Field

The following table gives the report of the Illinois Pipe Line Co. in Illinois:

Gross stocks, July 1	2,034,925.3
Runs from wells	611,726.4
Other receipts	295,843.8
Regular deliveries	474,400.4
Other deliveries	504,808.6

The amount of Illinois oil run by the Tide Water Pipe Co. in June was 29,249.44 bbls. and deliveries were 67,817.34 bbls. Adding these figures to those of the Illinois Pipe Line Co. makes the runs and deliveries as follows:

1926—	Runs	Deliveries
June	693,102.24	558,054.94
July	713,490.66	490,092.82
August	701,795.92	555,766.69
September	688,798.66	516,082.05
October	681,648.96	531,467.38
November	651,263.38	498,439.27
December	668,909.58	587,947.61
1927—		
January	621,421.03	530,085.98
February	595,831.16	476,950.71
March	727,593.91	554,947.43
April	593,225.97	444,818.49
May	728,759.40	543,192.02
June	640,975.85	532,217.73

Tide Water Pipe Co., Ltd., also delivered in June, 205,879.96 bbls.

AVERAGE DAILY RECEIPTS OF CALIFORNIA OIL AT ATLANTIC AND GULF COAST PORTS

Average bbls. per day—	ATLANTIC PORTS Baltimore	Boston	New York	Philadelphia	Others	Total	GULF COAST PORTS Galveston	New Orleans Baton Rouge	Port Arthur Sabine Pass	Tampa	Total	Total All Ports
March	16,616	5,484	56,710	13,871	13,419	106,097	.....	.....	.....	454	.....	106,551
April	12,667	4,367	47,667	15,100	13,300	93,100	.....	.....	.....	.....	.....	93,100
May	10,452	7,645	18,387	9,226	6,226	51,925	.....	.....	.....	.....	.....	51,925
June	25,567	11,233	48,833	17,367	17,367	120,367	.....	.....	.....	.....	.....	120,367

AVERAGE DAILY IMPORTS OF PETROLEUM AT PRINCIPAL UNITED STATES PORTS

Average bbls. per day—	ATLANTIC PORTS Baltimore	Boston	New York	Philadelphia	Others	Total	GULF COAST PORTS Galveston	New Orleans Baton Rouge	Port Arthur Sabine Pass	Tampa	Total	Total All Ports
March	4,677	13,161	62,484	9,226	26,129	116,677	6,742	36,258	2,419	4,871	50,290	166,967
April	22,700	9,033	62,033	6,067	26,567	126,400	5,067	18,033	.....	.....	23,100	149,500
May	21,032	9,807	93,452	7,774	23,580	155,645	1,807	30,612	1,936	.....	34,355	190,000
June	18,167	9,700	83,867	10,900	16,567	139,200	2,000	31,800	.....	.....	33,800	173,000

GROSS PRODUCTION OF THE UNITED STATES FOR 12 MONTHS

(IN BARRELS)

1926—		California	Oklahoma	Texas	Kansas	Arkansas	Louisiana	Rocky Mountains	Eastern Fields	Total
July:	Month	18,743,199	14,657,482	13,983,759	3,582,267	5,019,892	2,173,813	3,336,664	3,420,000	64,917,076
	Daily average	604,619	472,822	451,089	115,575	161,932	70,123	107,634	110,323	2,094,099
August:	Month	18,765,080	14,618,236	17,093,586	3,681,436	4,878,191	2,190,739	3,457,697	3,339,500	68,024,465
	Daily average	605,325	471,556	551,406	118,756	157,361	73,896	111,538	107,726	2,194,328
September:	Month	18,104,954	14,466,510	17,580,100	3,450,060	4,603,230	2,079,840	3,141,123	3,330,000	66,755,817
	Daily average	603,498	482,217	586,003	115,002	153,441	69,328	104,704	111,000	2,225,194
October:	Month	18,966,058	15,720,689	19,001,388	3,714,637	4,625,138	2,166,559	3,071,720	3,398,000	70,664,189
	Daily average	611,808	507,119	612,948	119,827	149,198	69,889	99,088	109,613	2,279,490
November:	Month	19,173,128	16,376,950	18,593,160	3,593,490	4,299,480	2,054,911	2,842,587	3,216,000	70,649,706
	Daily average	639,104	562,565	619,772	119,783	143,316	68,497	94,752	107,200	2,354,990
December:	Month	20,276,950	17,882,908	19,763,591	3,654,156	4,266,189	2,018,734	2,658,301	3,313,000	73,823,829
	Daily average	654,095	576,868	637,212	117,876	137,619	65,120	85,752	106,871	2,381,414
1927—										
January:	Month	20,184,872	19,035,426	18,605,363	3,769,879	4,076,469	1,905,570	2,620,303	3,332,500	73,530,382
	Daily average	651,125	614,046	600,173	121,609	131,499	61,470	84,203	107,500	2,371,948
February:	Month	17,982,711	19,752,348	16,483,712	3,352,076	3,574,256	1,784,104	2,385,135	3,007,200	68,321,542
	Daily average	642,240	705,441	588,704	119,717	127,652	63,718	85,183	107,400	2,440,055
March:	Month	19,835,724	22,480,921	18,232,617	3,675,143	3,853,920	2,032,982	2,476,798	3,325,800	75,923,905
	Daily average	639,862	725,191	588,149	118,553	124,320	65,580	79,574	105,100	2,449,158
April:	Month	19,493,825	22,208,130	17,801,140	3,516,930	3,378,240	1,994,330	2,615,770	3,474,000	74,482,365
	Daily average	648,870	740,271	593,371	117,231	112,608	66,491	87,193	115,800	2,482,745
May:	Month	19,506,054	23,258,463	19,539,083	3,704,314	3,493,669	1,935,175	2,742,588	3,467,000	77,646,346
	Daily average	629,233	750,273	630,293	119,494	112,699	62,425	88,471	111,839	2,504,721
June:	Month	19,181,442	22,830,330	18,399,810	3,437,580	3,365,760	1,860,820	2,592,437	3,330,000	75,018,179
	Daily average	639,381	761,011	613,327	114,586	112,192	62,694	86,414	111,000	2,500,606
	Total 12 months	230,213,997	223,788,393	215,067,309	43,131,968	49,434,434	24,217,577	33,941,123	39,963,000	859,757,801

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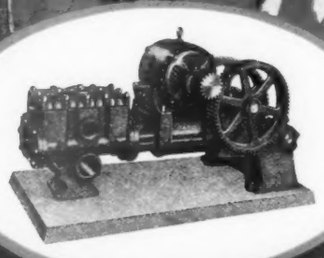

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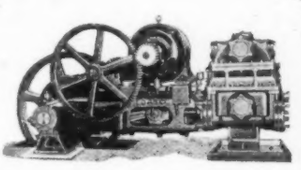

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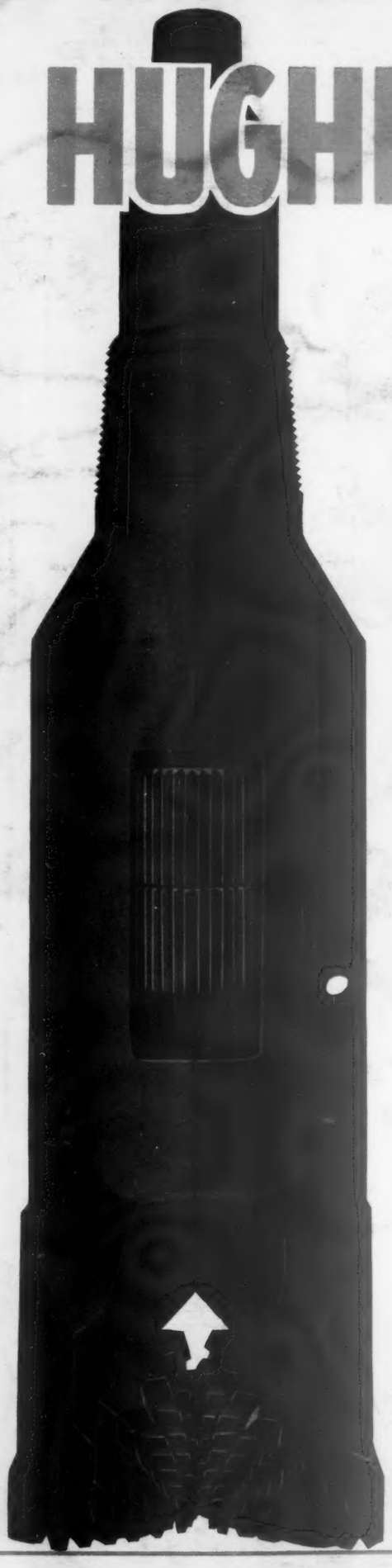

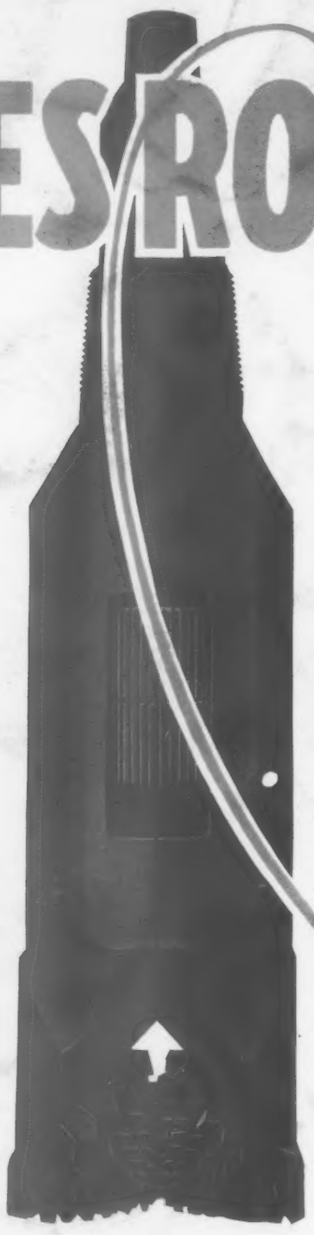

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